

Documentation for  
the Survey of  
Pesticide Use  
During the Gulf War

**THE SURVEY INSTRUMENT**

*Dalia M. Spektor*

*Elaine Reardon*

*Sarah K. Cotton*

The research described in this report was sponsored by the Office of the Secretary of Defense (OSD). The research was conducted in RAND's National Defense Research Institute, a federally funded research and development center supported by the OSD, the Joint Staff, the unified commands, and the defense agencies under Contract No. DASW01-95-C-0059.

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## THE SURVEY INSTRUMENT

*Dalia M. Spektor*  
*Elaine Reardon*  
*Sarah K. Cotton*

MR-1226-OSD

*Prepared for the Office of the Secretary of Defense*

**National Defense Research Institute**

**RAND**

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## **PREFACE**

This report documents the survey instrument used to assess the extent of pesticide use during the Gulf War and the letter and other advance materials sent out to potential participants. RAND's analysis of the data collected through the survey is reported in *Pesticide Use During the Gulf War: A Survey of Gulf War Veterans* (MR-1018/12-OSD, 2000).

This research was sponsored by the Office of the Special Assistant for Gulf War illnesses and was carried out jointly by RAND Health's Center for Military Health Policy Research and the Forces and Resources Policy Center of the National Defense Research Institute (NDRI). NDRI is a federally funded research and development center sponsored by the Office of the Secretary of Defense, the Joint Staff, the unified commands, and the defense agencies.

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## **Advance Materials**

1. Letter to Potential Respondents
2. Background Brochure
3. Gulf War Map, Calendar/Key Events, and Fact Sheet



SPECIAL ASSISTANT  
FOR  
GULF WAR ILLNESSES

OFFICE OF THE SECRETARY OF DEFENSE  
1000 DEFENSE PENTAGON  
WASHINGTON, DC 20301-1000

«first»«middle»«last»  
«address»  
«city» «state» «zip»

April 26, 1999  
RCS DD-SD (OT) 2066  
OMB 0704-04-06,  
Expiration September 30, 2000

Dear «prefix»«last»:

I am writing to ask you to participate in an important nationwide telephone survey of Gulf War veterans. Only you can provide the first-hand knowledge that we need for this important survey. The goal of the survey is to gather information about the use of various forms of pesticides during the Gulf War deployment.

Participation is voluntary, but I hope that you will decide to complete this 30 minute telephone interview. This is your opportunity to contribute to the Department of Defense's review of pest control problems and procedures in the Persian Gulf. This survey will provide valuable information that the Department of Defense will combine with other data to assess levels of pesticide exposure during the Gulf War.

The telephone survey is being conducted by RAND, a non-profit research center in Santa Monica, California that is under contract to the Department of Defense. An interviewer from RAND will call you in the next few weeks to make an appointment to interview you over the phone. The interview can be conducted at whatever time is convenient for you – during the day, in the evening, or on the weekend.

The survey will be conducted with strict confidentiality. Only aggregated information will be provided to DoD. Data linking individuals with their responses will not be released and will be purged upon completion of the survey.

The enclosed brochure, Survey of Pest Control Problems and Pesticide Use During the Gulf War, tells you more about the survey. We've also enclosed a map of the Persian Gulf area and a calendar with key events. Prior to your interview, we'd like you to review this material and fill out the enclosed Gulf War Service Fact Sheet. By filling out the fact sheet prior to the interview, you will help reduce the time it will take to complete the survey. Thank you for your help in this important survey.

Sincerely,

Dr. Bernard Rostker  
Special Assistant for Gulf War Illnesses

PRIVACY ACT NOTICE: Authority: Title 10 U.S.C. § 131, § 136, and §2358, and E.O. 9397.

Principal Purpose: To gather information about the use of various forms of pesticides on shore during the Gulf War deployment.

Routine Uses: Aggregate survey data, without personal identifiers, may be provided to the Department of Veterans Affairs, the Department of Health and Human Services, and the Environmental Protection Agency to permit investigative, scientific, medical, and other analyses regarding Gulf War illnesses and to the Presidential Special Oversight Board for purposes of carrying out those functions as set forth in Executive Order 13075 or such further Order as directed by the President.

Disclosure: Voluntary. Not providing information will have no effect on any right or benefit of the individual.

AGENCY DISCLOSURE NOTICE: The public reporting burden for this collection of information is estimated to average 30-45 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports (OMB 0704-04-06, expiration September 30, 2000), 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.



**1999**

**Survey of Pest Control Problems  
and Pesticide Use During the Gulf War**

**BACKGROUND BROCHURE**

RAND, P.O. Box 2138, Santa Monica, CA 90407-2138

OMB 0704-04-06, Expiration September 30, 2000  
RCS DD-SD(OT) 2066

## **WHAT IS THE PURPOSE OF THE TELEPHONE SURVEY?**

This survey will help the Department of Defense to better understand both how widespread the pest control problems were in the Persian Gulf, and to identify the pesticides that you and others used to kill or control bugs, rats, and other pests while you were there.

## **WHO IS TAKING PART IN THE STUDY?**

We are asking a random sample of about 3,000 officers and enlisted personnel who served in Saudi Arabia, Kuwait, Iraq, Oman, Bahrain, Qatar, or the United Arab Emirates (UAE) as part of Operation Desert Shield or Desert Storm to participate.

Our sample includes veterans who served in the Persian Gulf, regardless of whether they are currently on active duty, in the Reserves or National Guard, retired from the military, or separated.

## **WHY IS THIS SURVEY IMPORTANT?**

The survey results will help the Department of Defense to evaluate the effectiveness of the pest control procedures that were in place in the Persian Gulf. It's important for you to take part in this survey, regardless of whether you personally used pesticides or experienced problems with bugs, rats, or other pests in the Gulf. The goal of this survey is to document the extent of pest problems and pesticide use in different locations in the Persian Gulf.

This survey is the largest and most comprehensive independent evaluation of pesticide use in the Persian Gulf ever undertaken. It will provide critical information that the Department of Defense will combine with other data to assess levels of pesticide exposure in the Persian Gulf.

## **WHO IS DOING THE SURVEY?**

The survey is sponsored by the Special Assistant to the Deputy Secretary of Defense for Gulf War Illnesses. RAND, a non-profit civilian research center in Santa Monica, California, will be administering and analyzing the survey.



## HOW WAS I CHOSEN?

You were selected at random to represent a larger group of soldiers, sailors, airmen, and Marines who served in the Persian Gulf between August 1990 and July 1991.

## HOW MUCH TIME WILL THE SURVEY TAKE?

The survey takes about 30 minutes to complete over the telephone.

## WHAT KINDS OF QUESTIONS WILL I BE ASKED?

The survey is divided into three parts.

*Part 1* asks a few general questions about your Gulf War service, including your arrival and departure dates; your unit assignments and locations; the type of quarters where you lived, ate, and worked; and whether you took PB pills to protect yourself against nerve gas agents.

*Part 2* focuses on your experiences during a selected month in the Gulf. This includes:

- \* problems you had with bugs, rats, and other pests in the areas where you lived, ate, and worked in the Gulf;
- \* the types of pesticides (sprays, powders, lotions, creams, liquids, flea or tick collars, pellets, crystals, and so forth) that you or others may have used to kill or control pests; and
- \* when and how you and others used different forms of pesticides.

*Part 3* asks a few general background questions about yourself.

## WHEN WILL THE PHONE SURVEY TAKE PLACE?

The surveys will be conducted between May 1999 and August 1999. A RAND interviewer will contact you soon to schedule a convenient time to conduct the interview. Or you can call the RAND toll free number to schedule an appointment: 800-255-6935

### **WILL MY SURVEY RESULTS BE KEPT PRIVATE?**

Yes. RAND will keep your answers strictly confidential. In presenting results from this survey, your answers will be combined with answers from other Gulf War veterans and reported only as aggregated statistics. We may also combine your survey responses with information provided to us by the Department of Defense from your administrative files, such as your Gulf War service dates, your duty assignments, your military occupational specialty and so forth. RAND will not release survey data that could identify you to anyone in your service, the Department of Defense, or anyone else, except as required by law.

This survey is completely voluntary. There is no penalty if you choose not to respond. However, RAND and the Department of Defense would like to strongly encourage you to participate. If you prefer not to answer a specific question for any reason, just tell the interviewer and the interviewer will go on to the next question.

### **WHO CAN ANSWER ANY FURTHER QUESTIONS I HAVE ABOUT THE SURVEY?**

If you have any questions about the *survey*, feel free to contact Sarah Cotton, RAND Survey Coordinator at the RAND toll free number: 800-255-6935.

### **WHO CAN ANSWER ANY FURTHER QUESTIONS I HAVE ABOUT MY GULF WAR SERVICE AND MILITARY BENEFITS?**

If you have questions about your *Gulf War service or military benefits*, the RAND interviewer will make arrangements for you to talk directly with one of the Defense Department Contact Managers who will be happy to assist you.

# GULF WAR

## Map, Calendar/Key Events, and Fact Sheet

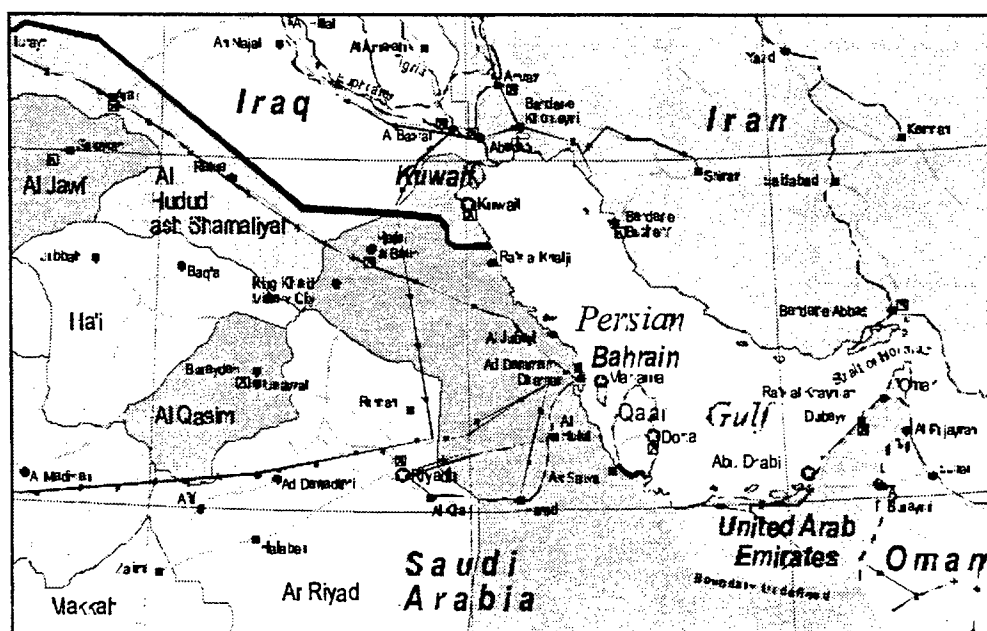
### Instructions

Please take a few minutes now to review the enclosed background materials **\*before\*** you complete the Telephone Survey of Pest Control Problems and Pesticide Use in the Gulf War. We also ask that you to complete the Service Fact Sheet on page 4 and have it ready when the RAND interviewer calls you. Thank you.

\*\*\*\*\*

### Map of Persian Gulf Theater of Operation

For this study, we are focusing on areas in the Persian Gulf including Kuwait, Iraq, Saudi Arabia, Oman, Bahrain, Qatar, and the United Arab Emirates (UAE).



© VACELLAN Geographix<sup>SM</sup> Santa Barbara, CA (800) 929-4627

# GULF WAR CALENDAR

## August 1990 - July 1991

<i>August 90</i>						
S	M	Tu	W	Th	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

<i>September 90</i>						
S	M	Tu	W	Th	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30		

<i>October 90</i>						
S	M	Tu	W	Th	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

<i>November 90</i>						
S	M	Tu	W	Th	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

<i>December 90</i>						
S	M	Tu	W	Th	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

<i>January 91</i>						
S	M	Tu	W	Th	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

<i>February 91</i>						
S	M	Tu	W	Th	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28					

<i>March 91</i>						
S	M	Tu	W	Th	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

<i>April 91</i>						
S	M	Tu	W	Th	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

<i>May 91</i>						
S	M	Tu	W	Th	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

<i>June 91</i>						
S	M	Tu	W	Th	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30		

<i>July 91</i>						
S	M	Tu	W	Th	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

**NOTE: See Key Gulf War events on next page →**

## KEY EVENTS DURING THE GULF WAR

### August 1990

- ☐ Iraq invades Kuwait 2 Aug 90
- ☐ Operation Desert Shield begins (C-Day); Air Force Fighter Squadron & Lead Elements of 82nd Airborne deploys 7 Aug 90
- ☐ President Bush orders blockade 12 Aug 90
- ☐ Saddam Hussein says "thousands of Americans would return home in body bags" 16 Aug 90
- ☐ Reservists and Guard troops called up or placed on alert 22 Aug 90

### September 1990

- ☐ Stop Loss Program goes into effect (many military personnel involuntarily kept in service) 1 Sept 90
- ☐ American civilian shot and wounded in Kuwait 6 Sept 90
- ☐ First Army RC units deploy to S.A. 7 Sept 90
- ☐ US calls on Europe to send troops 10 Sept 90
- ☐ Major combat elements of 24<sup>th</sup> Infantry Division (Mech) close in theater 12 Sept 90

### October 1990

- ☐ General Colin Powell flies to Riyadh to discuss offensive plans 21 Oct 90
- ☐ General Powell visits troops in Saudi Arabia 23 Oct 90
- ☐ World Series – Cincinnati sweeps Oakland 16 – 27 Oct 90

### November 1990

- ☐ Secretary of State Baker visits troops in Saudi Arabia 4 Nov 90
- ☐ Secretary of Defense increases Army selected Reserve call-up authority to 80,000 and authorizes call-up of Reserve combat units 14 Nov 90
- ☐ Operation Imminent Thunder (amphibious multiservice training exercise) begins near southern border of Kuwait Nov 90
- ☐ President Bush visits troops in Saudi Arabia 20 Nov 90
- ☐ Thanksgiving 25 Nov 90

### December 1990

- ☐ Last elements of XVIII Airborne Corps arrives in theater; Secretary of Defense increases Army selected Reserve call-up authority to 115,000 1 Dec 90
- ☐ First ship carrying VII Corps equipment arrives in Saudi Arabia from Germany 6 Dec 90
- ☐ Set January 15 UN deadline for Iraqi withdrawal 6 Dec 90
- ☐ Christmas Dec 90

### January 1991

- ☐ Operation Desert Storm and Air War begins (D-Day) 17 Jan 91
- ☐ Iraq attacks Israel with seven scud missiles 18 Jan 91
- ☐ Iraqis take Khafji 29 – 30 Jan 91
- ☐ Khafji is recaptured 31 Jan 91
- ☐ First US casualties 31 Jan 91

### February 1991

- ☐ Strike on Al Firdos bunker kills more than two hundred civilians and leads to restrictions on strategic bombing campaign 8–13 Feb 91
- ☐ Start of ground offensive 24 Feb 91
- ☐ Scud missiles kill 28 US soldiers in barracks in Al Khobar 26 Feb 91
- ☐ Ceasefire 28 Feb 91

### March 1991

- ☐ Task Force Freedom begins emergency recovery operations in Kuwait 1 Mar 91
- ☐ Cease-fire terms accepted by Iraq at Safwan Airfield 3 Mar 91
- ☐ Most POWs released 5 Mar 91
- ☐ R-Day (official redeployment begins) 10 Mar 91
- ☐ US shoots down Iraqi warplane, forcing another to land 21 Mar 91

### April 1991

- ☐ Iraq accepts UN cease-fire conditions and resolutions; Operation Provide Comfort begins 7 Apr 91
- ☐ Permanent ceasefire 12 Apr 91

**Please fill out the Gulf War Service Fact Sheet on next page →**

## GULF WAR SERVICE FACT SHEET

Please record the following information and have it ready when the RAND interviewer calls you.

1. For the period from August 1990 to July 1991, how many months did you serve on the ground in Kuwait, Iraq, Saudi Arabia, Oman, Bahrain, Qatar, or the United Arab Emirates (UAE)?

# Months: \_\_\_\_\_

2. Enter the dates you served on the ground in the Gulf between August 1990 and July 1991:

Tour 1: \_\_\_\_\_  
                    Start Date                      End Date

Tour 2: \_\_\_\_\_  
                    Start Date                      End Date

3. List the names of unit(s) you served with on the ground in the Gulf between August 1990 and September 1991:

a. \_\_\_\_\_

b. \_\_\_\_\_

c. \_\_\_\_\_

4. List the locations where you served on the ground in the Gulf between August 1990 and July 1991 and the approximate dates you served in each area:

Dates

a. \_\_\_\_\_                      \_\_\_\_\_ / \_\_\_\_\_ to \_\_\_\_\_ / \_\_\_\_\_

b. \_\_\_\_\_                      \_\_\_\_\_ / \_\_\_\_\_ to \_\_\_\_\_ / \_\_\_\_\_

c. \_\_\_\_\_                      \_\_\_\_\_ / \_\_\_\_\_ to \_\_\_\_\_ / \_\_\_\_\_

d. \_\_\_\_\_                      \_\_\_\_\_ / \_\_\_\_\_ to \_\_\_\_\_ / \_\_\_\_\_

e. \_\_\_\_\_                      \_\_\_\_\_ / \_\_\_\_\_ to \_\_\_\_\_ / \_\_\_\_\_

5. Did you see or hear about problems with bugs, rats or other pests in the areas where you lived, ate, or worked in the Gulf?

\_\_\_\_\_ Yes                      \_\_\_\_\_ No

6. Did you or others use pesticides to kill or control pests in the places where you lived, ate, or worked in the Gulf?

\_\_\_\_\_ Yes                      \_\_\_\_\_ No

---

# Survey

**MODULE 1:**  
**INTRODUCTION AND SCREENER**

ENTER INTERVIEWER ID CODE: XXXX

ENTER CASE ID CODE: \_\_\_\_\_ XXXXX

ENTER TIME BEGAN: \_\_\_\_\_ AM / PM

➔ NOTE TO CATI Programmer: Please setup a Master Comments Screen that the interviewer can access at any point in the interview to record the respondents' comments about their pesticide exposure and other concerns.

conf. Hello, may I speak to (FULL NAME)?

My name is \_\_\_\_\_ and I'm calling from RAND, which is a research center in Santa Monica, California. I am calling on behalf of the Department of Defense regarding a telephone survey that we're currently conducting of Gulf War veterans.

(Mark One)

- 1 RESPONDENT IS HOME → CONTINUE WITH QUESTION 2
- 2 SOMEONE ELSE ANSWERS THE PHONE → FIND OUT THE BEST TIME TO CALL BACK AND RECORD ON CATI CALL RECORD.
- 3 RESPONDENT DID NOT SERVE IN THE GULF WAR → END INTERVIEW
- 4 OTHER – END INTERVIEW AND RECORD OUTCOME CODE IN CATI

intr. You should have received a letter from the Department of Defense that invited you to take part in the Telephone Survey of Pest Control Problems and Pesticide Use in the Gulf War.

Did you receive the letter and brochure that we mailed you?

(Mark One)

- 1 YES → GO TO QUESTION 2B
- 0 NO → CONTINUE WITH QUESTION 2A



Q2A. I'm sorry that you haven't received the letter. We mailed the letter to (ADDRESS), (CITY, STATE, ZIP).

Is that your correct mailing address?

(Mark One)

1 YES → Apparently the letter has been delayed in the mail, but let me briefly tell you what it says.

0 NO → I will get your correct address later, but let me briefly tell you what the letter says.

Q2B. (As you know from the materials we sent you), the Department of Defense has asked RAND to conduct a nationwide telephone survey of Gulf War veterans. The purpose of the survey is to gather information about the use of various forms of pesticides in the Persian Gulf. The survey asks about problems you may have had with pests in the Persian Gulf, and the pesticides that you or others used to kill or control bugs, rats, and other pests. We would like you to help us today by participating in a 30 minute phone interview. The interview is voluntary and confidential.

The survey has been approved by the Department of Defense and the Office of Management and Budget (OMB). The Department of Defense will combine the survey results with other data to assess levels of pesticide exposure in the Persian Gulf. I am required by law to tell you that the OMB approval number for this survey is (0704-04-06) which expires on (September 30, 2000).

Q2Ba. Would you like me to read you the Privacy Act Notice that gives more information about the purpose of the survey and how the findings will be used?

(Mark One)

1 YES → GO TO QUESTION 2C

0 NO → GO TO 2D

Q2C. IF THE RESPONDENT ASKS, READ THE FOLLOWING FOUR SECTIONS OF THE PRIVACY ACT STATEMENT ALOUD. (Q2Ba = YES).

AUTHORITY: This survey is being conducted under the authority of the United States Code 10, Sections 136 and 2358.

The survey will be conducted with strict confidentiality. Only aggregated information will be provided to DoD. Data linking individuals with their responses will not be released and will be purged upon completion of the study.

PURPOSE: The information collected in the telephone survey will be used by the Department of Defense to better understand which Gulf War units and veterans had pest control problems; the types of pesticides used to kill or control bugs, rats, and other pests to prevent them from bothering or harming US troops; and when and how these pesticides were used by US troops and others. The survey results will be provided to the Special Assistant to the Secretary of Defense for Gulf War Illnesses, and they will be used in reports and testimony provided to Congress. Some results may be published by RAND, professional journals, or reported in manuscripts presented at conferences, symposia, and scientific meetings.

Q2Ca. DISCLOSURES: Your participation in the survey is voluntary. There is no penalty if you choose not to respond. However, since only a sample of Gulf War veterans are being asked to take part in this survey, we hope that you will respond. We will use the information you give us for research purposes only. We will protect the confidentiality of this information, and will not disclose information that identifies your answers to anyone outside of the research project, *except as required by law*. We will not identify you by name in any reports we write. We will destroy all information that identifies you at the end of the study.

ROUTINE USES: Aggregate survey data, without personal identifiers, may be provided to the Department of Veterans Affairs, the Department of Health and Human Services, and the Environmental Protection Agency to permit investigative, scientific, medical, and other analyses regarding Gulf War illnesses and to the Presidential Special Oversight Board for purposes of carrying out those functions as set forth in Executive Order 13075 or such further Order as directed by the President.

ANSWER ANY QUESTIONS BEFORE CONTINUING. USE THE ADVANCE LETTER AND BROCHURE AS A GUIDE IN ANSWERING QUESTIONS.

Q2D. If now is a good time to do the interview, we can begin right away.

(Mark One)

1 YES → GO TO inta

0 NO → FIND OUT BEST DAY / TIME TO CALL BACK AND RECORD  
APPOINTMENT TIME IN CATI

3 REMAIL LETTER / BROCHURE → RESPONDENT DID NOT GET ORIGINAL LETTER / BROCHURE  
AND WANTS A COPY BEFORE DECIDING WHETHER  
TO PARTICIPATE. VERIFY AND UPDATE ADDRESS. END INTERVIEW.

R REFUSED → FILL OUT REFUSAL REPORT AT END OF INTERVIEW.

---

inta. Before we begin, I also need to inform you that for quality control purposes, my supervisor may monitor this call to check on how well I am doing.

#### RESPONDENT VERIFICATION

Q4. Before I proceed any further, I need to confirm your name, address, and the last four digits of your social security number.

Q4A. Is your correct name (Mr. / Mrs. / Ms.: \_\_\_\_\_)?  
(Mark One)

1 YES

0 NO → ENTER CORRECT NAME IN CATI

Q4B. Is your current address (READ ADDRESS)?

(Mark One)

1 YES → GO TO Q4D

0 NO → ENTER CORRECT ADDRESS IN CATI. GO TO Q4C.

Q4C. What is your current mailing address?  
ENTER ADDRESS INTO CATI.

Q4D. Are the last four digits of your social security number (READ #)?

(Mark One)

1 YES → GO TO Q5

0 NO → ASK Q4E

Q4E. What is your social security number? (IF RESPONDENT HAS CONFIDENTIALITY CONCERNS, YOU CAN SAY: If you would prefer, you may give me just the last four numbers of your social security number.)  
ENTER SOCIAL SECURITY NUMBER IN CATI

ENTER INTO CATI \_\_\_\_

Q5. Next, I'd like to ask about your current status and your Gulf War service. Are you currently  
[READ LIST]

(Mark One)

1 On active duty,

2 In the Reserves or National Guard,

3 Retired from the military, or

4 A civilian?

Q6. Did you serve in Saudi Arabia, Kuwait, Oman, Bahrain, Qatar, Iraq, or the United Arab Emirates (UAE) as a part of Desert Shield or Desert Storm between August 1990 and July 1991?

(Mark One)

1 YES → GO TO Q7

0 NO → END INTERVIEW. RESPONDENT IS NOT ELIGIBLE FOR SURVEY.

Q7. For the period between August 1990 and July 1991, our records show that you served in the Persian Gulf for about [NN] months from [START DATE] to [END DATE]

Is this correct?

(Mark One)

1 YES → GO TO Q7A

0 NO → GO TO Q7d1.

CATI CHECK: IF START DATE AND END DATE ARE BLANK, GO TO Q7d1.

ALLOW ENTRIES FOR UP TO THREE SEPARATE TOURS IN THE GULF WAR.  
INCLUDE ACTUAL START AND END DATES, BUT HAVE CATI SELECT ONLY  
FROM AUGUST 1990 – JULY 1991.

Q7d1. ENTER CORRECT START AND END DATES FOR EACH TOUR  
BETWEEN 8 / 1 / 90 – 7 / 31 / 91 INTO CATI.

Tour 1: [Start Date] [End Date]

Tour 2: [Start Date] [End Date]

Tour 3: [Start Date] [End Date]

CATI CHECK: IF TOUR IS LESS THAN 15 DAYS GO TO BADTOUR.

BADTOUR. I have that you were on the ground in the Persian Gulf for less than 15 days between  
August 1990 and July 1991. Is this correct?

(Mark One)

1 YES – DATES GIVEN ARE CORRECT

0 NO – INCORRECT DATES GIVEN, NEED TO CORRECT

CATI CHECK: IF BADTOUR = 1 END INTERVIEW (ETIME2).

Q7d2. Please give me the dates when you were not on the ground. Do not include periods of less than two  
weeks. BLACKOUT DATES MUST BE WITHIN TOUR DATES.

Tour 1: [Start Date] [End Date]

Tour 2: [Start Date] [End Date]

Tour 3: [Start Date] [End Date]

CATI CHECK: IF Q7 = 1 AND R WAS IN NAVY OR COAST GUARD, ASK NEXT QUESTION.

Q7A. Did you spend any of this time at sea and so not physically located on the ground during your tour(s)?

(Mark One)

1 YES → GO TO Q7d2

0 NO → GO TO Q8

CATI CHECK: IF Q7 = 1 AND R WAS NOT IN NAVY OR COAST GUARD, ASK NEXT QUESTION.

Did you spend any of this time not physically stationed on the ground?

(Mark One)

1 YES – AT LEAST TWO WEEKS NOT ON GROUND → GO TO Q7d2

0 NO – ALL TIME ON GROUND → GO TO Q8

#### GENERAL AWARENESS OF GULF WAR ISSUES

Now I have a few general questions about the Gulf War.

Q8. Before today, how much have you thought about your Gulf War experiences in general? Would you say (READ LIST):

(Mark One)

1 A lot,

2 Some,

3 A little, or

4 Almost none?

Q9. Before today, how much have you thought about problems you had with bugs, rats, or other pests in the Persian Gulf, and the pesticides you or others used to get rid of these problems? Would you say [READ LIST]:

(Mark One)

1 A lot,

2 Some,

3 A little, or

4 Almost none?

**MODULE 2:**  
**ONE MONTH IN THE PERSIAN GULF**

FOR MAIN STUDY, CATI WILL RANDOMLY SELECT ONE MONTH USING THE SAMPLING ALGORITHM PROVIDED BY THE RAND STATISTICIAN. THE DATA PROVIDED IN QUESTION 7 WILL BE USED TO RANDOMLY SELECT ONE MONTH TO DISCUSS FOR THE REMAINDER OF THE PESTICIDE QUESTIONS.

- Q10. I would like to ask you about your experiences during one month that you were in the Gulf. We will be focusing on only one month during your tour in order to get the most detailed information we can without making the survey too long for any one person. The month is chosen at random for each veteran. We will be combining all veterans' responses in the end to get a detailed picture of the entire war from start to finish.

My computer will choose one month at random from all the months you were on the ground in the Gulf. It has chosen [RANDOM MONTH OR FIRST/LAST 30 DAYS OF TOUR].

- Q11. Please take a minute to visualize where you were staying in the Gulf in [RANDOM MONTH OR FIRST/LAST 30 DAYS OF TOUR]. PAUSE. Think also about any particular details that happened during that time.

Are you able to remember where you were staying during [RANDOM MONTH OR FIRST/LAST 30 DAYS OF TOUR]?

PROBES, IF NECESSARY:

- Think about special events that might have occurred during this particular month. This could be events during the war, or personal things like your child's birthdate, a holiday, or some other special occasion that stands out in your mind.
- Would you like me to read you a couple of key events that occurred during [RANDOM MONTH OR FIRST/LAST 30 DAYS OF TOUR]? This might help you remember where you were at that time. IF YES: READ KEY EVENTS FROM GULF WAR TIMELINE.
- Did this help you to remember what you were doing in [RANDOM MONTH OR FIRST/LAST 30 DAYS OF TOUR]?

(Mark One)

- 1 YES → GO TO Q12  
0 NO → ASK Q11A

Q11A. Since you can't recall what you were doing this exact time period, do you remember where you lived and worked close to [RANDOM MONTH OR FIRST/LAST 30 DAYS OF TOUR]?

INTERVIEWER NOTE: CODE NO IF R CANNOT RECALL A SPECIFIC TIME PERIOD WITHIN A ONE-MONTH WINDOW ON EITHER SIDE OF RANDOM DATE.

(Mark One)

1 YES → What is the closest time period you can remember?

1 = Jan	2 = Feb	3 = Mar	4 = Apr
5 = May	6 = Jun	7 = Jul	8 = Aug
9 = Sep	10 = Oct	11 = Nov	12 = Dec

REMEMBERS SPECIFIC MONTH, ENTER MONTH NUMBER: @newmo

OR

ENTER SPECIFIC START AND END DATE

START DATE: MM / YY

END DATE: MM / YY

THEN SKIP TO Q12.

0 NO / DK → GO TO MODULE 4 Qs AND THEN END INTERVIEW  
IF RESPONDENT CANNOT RECALL A SPECIFIC TIME PERIOD  
CLOSE TO [RANDOM MONTH OR FIRST/LAST 30 DAYS OF TOUR]

## KEY EVENTS DURING THE GULF WAR

### August 1990

- ☐ Iraq Invades Kuwait 2 Aug 90
- ☐ Operation Desert Shield begins (C-Day); Air Force Fighter Squadron & Lead Elements of 82<sup>nd</sup> Airborne deploys (XVIII Airborne Corps begins to deploy) 7 Aug 90
- ☐ President Bush orders blockade 12 Aug 90
- ☐ Hussein says "thousands of Americans will return home in body bags" 16 Aug 90
- ☐ Reservists and Guard troops called up or placed on alert 22 Aug 90

### September 1990

- ☐ Stop Loss Program goes into effect (many military personnel involuntarily kept in service) 1 Sept 90
- ☐ American civilian shot and wounded in Kuwait 6 Sept 90
- ☐ First Army RC units deploy to Saudi Arabia 7 Sept 90
- ☐ US calls on Europe to send troops 10 Sept 90
- ☐ Major combat elements of 24<sup>th</sup> Infantry Division (Mech) close in theater 12 Sept 90

### October 1990

- ☐ General Colin Powell flies to Riyadh to discuss offensive plans 21 Oct 90
- ☐ General Powell visits troops in Saudi Arabia 23 Oct 90
- ☐ World Series - Cincinnati sweeps Oakland 16 - 27 Oct 90

### November 1990

- ☐ Secretary of State Baker visits troops in Saudi Arabia 4 Nov 90
- ☐ Secretary of Defense increases Army selected Reserve call-up authority to 80,000 and authorizes call-up of Reserve combat units 14 Nov 90
- ☐ Operation Imminent Thunder (amphibious multiservice training exercise) begins near southern border of Kuwait Nov 90
- ☐ President Bush visits troops in Saudi Arabia 20 Nov 90
- ☐ VII Corps begins deployment to Saudi Arabia 21 Nov 90
- ☐ Thanksgiving 25 Nov 90

### December 1990

- ☐ Last elements of XVIII Airborne Corps arrives in theater; Secretary of Defense increases Army selected Reserve call-up authority to 115,000 1 Dec 90
- ☐ First ship carrying VII Corps equipment arrives in Saudi Arabia from Germany 6 Dec 90
- ☐ January 15 UN deadline set for Iraqi withdrawal 6 Dec 90
- ☐ Christmas Dec 90

### January 1991

- ☐ Operation Desert Storm and Air War begins (D-Day) 17 Jan 91
- ☐ Iraq attacks Israel with seven Scud missiles 18 Jan 91
- ☐ Iraqis take Khafji 29 - 30 Jan 91
- ☐ Khafji is recaptured 31 Jan 91
- ☐ First US casualties 31 Jan 91

### February 1991

- ☐ Strike on Al Firdos bunker kills more than two hundred civilians and leads to restrictions on strategic bombing campaign 8 - 13 Feb 91
- ☐ Start of ground offensive 24 Feb 91
- ☐ Scud missile kills 28 US soldiers in barracks in Al Khobar 26 Feb 91
- ☐ Ceasefire 28 Feb 91



**March 1991**

- |  |           |
|--|-----------|
| <input type="checkbox"/> Task Force Freedom begins emergency recovery operations in Kuwait | 1 Mar 91  |
| <input type="checkbox"/> Cease-fire terms accepted by Iraq at Safwan Airfield              | 3 Mar 91  |
| <input type="checkbox"/> Most POWs released  | 5 Mar 91  |
| <input type="checkbox"/> R-Day (official redeployment begins)                              | 10 Mar 91 |
| <input type="checkbox"/> US shoots down Iraqi warplane, forcing another to land            | 21 Mar 91 |

**April 1991**

- |  |           |
|--|-----------|
| <input type="checkbox"/> Iraq accepts UN cease-fire conditions and resolutions; Operation Provide Comfort begins | 7 Apr 91  |
| <input type="checkbox"/> Permanent ceasefire   | 12 Apr 91 |

VERIFY UNIT ASSIGNMENT AND LOCATION

Q12. Please answer the remaining questions in this interview about . . .

- 1 IF Q11 = YES, SAY: your experiences during [RANDOM MONTH  
OR FIRST/LAST 30 DAYS OF TOUR].
- 2 IF Q11A = YES, SAY: your experiences from [START DATE in Q11A]  
to [END DATE IN Q11A].

CATI CHECK: IF LOCATION IS CLASSIFIED, GO TO Q14.

FOR ARMY, MARINES, NAVY & COAST GUARD:

Q12A. Our records show that you were with [UNIT LISTED IN CATI] during all of [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A]. Is this correct?

- 1 IF YES, GO TO Q15
- 0 IF NO, GO TO Q14

FOR AIR FORCE WITH LOCATION CODE OTHER THAN ARMY:

Q12A. Our records show that you were located in [LOCATION LISTED IN CATI] during all of [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A]. Is this correct?

- 1 IF YES, GO TO Q15
- 0 IF NO, GO TO Q14A

FOR AIR FORCE WITH LOCATION CODE = ARMY:

Q12A. Our records show that you were with the Army unit [UNIT LISTED IN CATI] during all of [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A]. Is this correct?

- 1 IF YES, GO TO Q15
- 0 IF NO, GO TO Q14

Q14. Which units did you serve with during this time? ADD UNIT NAME(S) IF NEEDED TO EXISTING UNIT LISTED ON CATI. ALLOW UP TO 3 ENTRIES.

Unit #1: \_\_\_\_\_

What additional unit(s) did you serve with?

Unit #2: \_\_\_\_\_

Unit #3: \_\_\_\_\_

- 0 MULTIPLE UNITS OR CONSTANTLY TRAVELING

Q14A. Where did you serve during this time? ADD UNIT NAME(S) IF NEEDED TO EXISTING LOCATION LISTED ON CATI. ALLOW UP TO 3 ENTRIES.

LOCATION #1: \_\_\_\_\_

LOCATION #2: \_\_\_\_\_

LOCATION #3: \_\_\_\_\_

0 MULTIPLE LOCATIONS OR CONSTANTLY TRAVELING

1 LOCATION CLASSIFIED / SECRET

Q15. Now we would like you to think back to that time. As we ask each question, feel free to take time to remember and to picture in your mind the places and activities I'm asking you about.

Which of the following four categories best describe your location in the Gulf during [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A]?  
Were you in—[READ LIST]?

(Mark All That Apply)

1 An urban city where tents were not used for living quarters,

2 A semi-permanent military tent city,

3 On a U.S. military airbase

4 On a non-U.S. airbase

5 In the desert away from cities, air bases, and semi-permanent tent cities, or

6 Some other type of place? \_\_\_\_\_

PLEASE DESCRIBE

CATI CHECK: IF MORE THAN ONE RESPONSE IS CODED IN Q15, ASK Q16.  
OTHERWISE, GO TO Q17.

Q16. Of the places you just mentioned, where did you stay most of the time during [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A]?

(SELECT UP TO TWO)

- 1 AN URBAN CITY WHERE TENTS WERE NOT USED FOR LIVING QUARTERS
- 2 A SEMI-PERMANENT MILITARY TENT CITY
- 3 ON A U.S. MILITARY AIRBASE
- 4 ON A NON-U.S. AIRBASE
- 5 IN THE DESERT AWAY FROM CITIES, AIR BASES, AND SEMI-PERMANENT TENT CITIES
- 6 SOME OTHER TYPE OF PLACE?
- 7 CONSTANTLY MOVING BETWEEN LOCATIONS – IMPOSSIBLE TO CHOOSE TWO TYPES OF QUARTERS

#### TYPE OF QUARTERS

The next questions are about the places where you lived, ate, and worked during [RANDOM DATE, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A].

Q17. Which of the following best describes the place where you slept most of the time during [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A]?

Did you sleep (READ LIST):

(Mark One)

- 1 In a building or warehouse, (ASK 17A)
- 2 In a tent, (ASK 17B)
- 3 In your military vehicle, (GO TO Q18)
- 4 Outdoors, or (GO TO Q18)
- 5 In some other type of place?

DESCRIBE: \_\_\_\_\_ (GO TO Q17C)

CATI NOTE: IF Q17 = 4 (OUTDOORS), SKIP TO Q18.

Q17A. Was it (READ LIST)?

(Mark One)

- |   |  |              |
|---|--|--------------|
| 1 | A permanent building or warehouse usually used for housing, or | (GO TO Q17C) |
| 2 | A building or warehouse <u>not</u> normally used for housing?  | (GO TO Q17C) |

Q17B. Did this tent have a floor connected to the side-walls of the tent?

[NOTE TO INTERVIEWERS: BY "FLOOR CONNECTED TO THE TENT" WE MEAN SEALED IN SOME WAY SO THAT BUGS COULDN'T GET THROUGH.]

Did this tent have air conditioning?

(Mark "1" Yes or "0" No for Each Item)

YES	NO	
1	0	a. A Floor
1	0	b. Air Conditioning

Q17C. During [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A], were the latrine or bathroom facilities you usually used located inside or outside?

(Mark One)

- 1 INSIDE
- 2 OUTSIDE
- 3 BOTH INSIDE AND OUTSIDE FACILITIES
- 4 NOT APPLICABLE / DID NOT HAVE BATHROOM FACILITIES

Q18. Which of the following best describes the place where you ate most of the time during [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A]?

[READ LIST]

(Choose One)

- 1 In a mess hall where food was prepared in the same location; → GO TO Q18A
- 2 In a mess hall where food was not prepared in the same location; → GO TO Q18MKT
- 3 In some other area set aside specifically as an eating area? → GO TO Q18MKT
- 4 NONE OF THE ABOVE → GO TO Q18E

Q18MKT. Was the food prepared in a MKT (mobile kitchen trailer)?

- 1 YES
- 0 NO

CATI CHECK: IF Q18 = 3, GO TO Q18A2.

Q18A. Was the mess hall in (READ LIST):  
(Mark One)

- 1 A building or structure, (ASK Q18B)
- 2 A tent, or (ASK Q18C)
- 3 Some other type of place?  
DESCRIBE: \_\_\_\_\_ (GO TO Q18D)

Q18A2. Was this eating area set up . . . (READ LIST):  
(Mark One)

- 1 Outdoors, (GO TO Q18D)
- 2 In a tent, (GO TO Q18C)
- 3 In a building or structure, (GO TO Q18B)
- 4 Or in some other type of place?  
DESCRIBE: \_\_\_\_\_ (GO TO Q18D)

Q18B. Was this building . . . [READ LIST]?  
(Mark One)

- 1 A permanent building or structure designed for eating or serving food, or (GO TO Q18D)
- 2 A building or structure not normally used for eating or serving food? (GO TO Q18D)

Q18C. At that time, did this tent have a floor connected to the side walls of the tent?

Did this tent have air conditioning?

(Mark "1" Yes or "0" No for Each Item)

YES NO

1 0 a. A Floor

1 0 b. Air Conditioning

Q18D. During [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A], how many meals did you usually eat in this location?

\_\_\_\_\_ (# OF MEALS)

PER: DAY

WEEK

MONTH

SOME OTHER PERIOD: \_\_\_\_\_

( FOR ALL THOSE THAT ARRIVED AT 18D, GO TO Q19I )

Q18E. Where did you eat your meals (MREs OR OTHERWISE) during [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A]?

Did you eat . . . [READ LIST]

MARK ALL THAT APPLY

YES NO

1 0 In a building or structure not normally used for eating, (GO TO Q20)

1 0 In a tent, (ASK Q19A)

1 0 In your military vehicle, (GO TO Q20)

1 0 Outdoors, (GO TO Q20)

1 0 In a local restaurant or private home, or (GO TO Q20)

1 0 Some other type of place?

DESCRIBE: \_\_\_\_\_ (GO TO Q20)

Q19I. Not counting the mess halls / designated eating areas we just talked about, did you also frequently eat in any other type of place during [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A]? By frequently, we mean once a week or more.

(Mark One)

- 1 YES → GO TO Q19  
0 NO → GO TO Q20

Q19. Did you frequently eat [READ LIST]?

(Mark "1" Yes or "0" No for Each Item)

YES      NO

- |   |   |   |
|---|---|---|
| 1 | 0 | In a building or structure <u>not</u> normally used for eating, (GO TO Q20) |
| 1 | 0 | In a tent, (ASK Q19A)   |
| 1 | 0 | In your military vehicle, (GO TO Q20)                                       |
| 1 | 0 | Outdoors, (GO TO Q20)   |
| 1 | 0 | In a local restaurant or private home, or (GO TO Q20)                       |
| 1 | 0 | Some other type of place?   |
|   |   | DESCRIBE: _____ (GO TO Q20)   |

Q19A. At that time, did this tent have a floor connected to the side walls of the tent?

Did this tent have air conditioning?

(Mark "1" Yes or "0" No for Each Item)

YES      NO

- |   |   |                     |
|---|---|---------------------|
| 1 | 0 | a. A Floor          |
| 1 | 0 | b. Air Conditioning |

Q20. During [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A], where did you usually work? Was it: . . . [READ LIST]?

- 1 In a building or warehouse, (GO TO Q21)  
2 In a tent, (ASK Q20A)  
3 In your military vehicle, (GO TO Q21)  
4 Outdoors, or (GO TO Q21)  
5 In some other type of place?



DESCRIBE: \_\_\_\_\_ (GO TO Q21)

Q20A. At that time, did this tent have a floor connected to the side walls of the tent?

Did this tent have air conditioning?

(Mark "1" Yes or "0" No For Each Item)

YES NO

1 0 a. A Floor

1 0 b. Air Conditioning

Q21. Before I ask about pests and pesticides, I'd first like to ask you a few questions about a pill that you might have taken while in the Persian Gulf to protect against nerve gas.

During [RANDOM DATE, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A] did you take PB pills or anti-nerve gas pills? These were small white pills in a foil package that you may have taken for more than one day. (IF NECESSARY, SAY: PB stands for pyridostigmine bromide pills.)

(Mark One)

1 YES → ASK Q21A AND Q21B

0 NO → GO TO NEXT MODULE

Q21A. During [RANDOM DATE, FIRST/LAST 30 DAYS OF TOUR, OR FROM START TO END DATES IN Q11A], how many days did you take PB pills?

# Days: \_\_\_\_\_

Q21B. Some people took PB pills when they got up in the morning, some took them during the day, and others took them at night. When you took PB pills, approximately how many pills did you take each day?

# of Pills Taken Each Day: \_\_\_\_\_

NOTE: IF RESPONDENT ANSWERS MORE THAN 4, CONFIRM WITH RESPONDENT.

**MODULE 3:**  
**PEST PROBLEMS AND PESTICIDE USE DURING RANDOM DATE OR DATES IN Q11A**

**TYPES OF PESTS**

Q22. Now, I would like to ask you about different pests that you might have seen or heard about in the places where you slept, ate, or worked during [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A].

Were there any [READ PEST]

MARK "1" YES OR "0" NO FOR EACH PEST

	<u>Yes</u>	<u>No</u>
a. Ants? .....	1	0
b. Flies? .....	1	0
c. Sand fleas or other types of fleas? .....	1	0
d. Mosquitoes? .....	1	0
e. Roaches? .....	1	0
f. Ticks? .....	1	0
g. Lice? .....	1	0
h. Mice, rats, or other rodents like gerbils or voles? .....	1	0
i. Spiders? .....	1	0
j. Wasps? .....	1	0
k. Scorpions? .....	1	0
[l. Centipedes? .....	1	0
m. Other pests? .....	1	0

Which ones? [SPECIFY]

CATI CHECK:

IF RESPONDENT MENTIONED 1 OR MORE PESTS IN QUESTION 22, READ Q23A.

IF RESPONDENT DID NOT MENTION ANY PESTS IN QUESTION 22, READ Q23B.

Q23A. These next questions are about pesticides that you or others might have used to kill or control pests in the areas where you slept, ate, or worked during [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A]. GO TO Q23C.

Q23B. I know you said that there weren't any pests in the areas where you stayed during [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A], but I have a few questions about pesticides. Perhaps one reason pests weren't a problem could be that pesticides did a good job of getting rid of them.

As you answer the next group of questions, please think about pesticides you or others might have used in the areas where you slept, ate, or worked during [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A]. CONTINUE WITH Q23C.

Q23C. As you probably know, pesticides come in many different forms, and are used in a variety of ways to kill or control pests. Some of these products are used directly on your body or uniform. Others are placed in containers in or around places where you sleep, eat, or work.

First I'll ask you about pesticides that you might have used on your body or uniform. Then I'll ask you about other pesticides that you and others may have used.

PESTICIDES USED ON BODY OR UNIFORM

Q24. During [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A], did you personally use any type of pesticide [READ ITEM] on your body or uniform?

(Mark "1" Yes or "0" No for Each Item)

	<u>YES</u>	<u>NO</u>
a. Sprays	1	0
b. Powders	1	0
c. Liquids	1	0
d. Lotions or creams	1	0
e. Flea or tick collars	1	0
f. Any <u>other</u> type of pesticide?	1	0

(EX: PESTICIDE HANDI-WIPES, STICK, ETC.)

DESCRIBE:

CATI CHECK Q24A-F:

RESPONDENT DID NOT USE ANY PESTICIDES ON BODY OR UNIFORM (Q24A-F = NO),  
GO TO Q94.

RESPONDENT USED A SPRAY ON HIS BODY OR UNIFORM (Q24A = YES), ASK Q25.

RESPONDENT DID NOT USE A SPRAY (Q24A = NO) BUT USED A POWDER (Q24B = YES),  
GO TO Q35.

RESPONDENT DID NOT USE A SPRAY (Q24A = NO) BUT USED A LIQUID (Q24C = YES),  
GO TO Q45.

RESPONDENT DID NOT USE A SPRAY (Q24A = NO) BUT USED A LOTION OR CREAM  
(Q24D = YES), GO TO Q55.

RESPONDENT DID NOT USE A SPRAY (Q24A = NO) BUT USED A FLEA OR TICK COLLAR  
(Q24E = YES), GO TO Q69.

RESPONDENT DID NOT USE A SPRAY (Q24A = NO) BUT USED SOME OTHER PESTICIDE  
(Q24F = YES), GO TO Q75.

PERSONAL USE OF PESTICIDE SPRAYS

Q25. Next, I'd like to ask you a few questions about each pesticide that you sprayed on your body or uniform. How many different sprays did you use on your body or uniform at that time?

(Mark One)

- 1      1
- 2      2
- 3      3
- 4      4 OR MORE

CATI CHECK: IF Q25 = 1, GO TO Q25r

Q25i. Can you remember your usage of these sprays individually, or did you use these sprays so interchangeably during [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A] that in thinking back you can't tell them apart?

- 1      REMEMBER INDIVIDUALLY
- 0      USED ALL INTERCHANGEABLY
- 2      SOME INDIVIDUALLY / SOME INTERCHANGEABLY

Q25r. Do you remember the name of the spray(s) you used in [RANDOM DATE OR DATES IN Q11A]?

(Mark One)

- 1      YES → ASK Q25n
- 0      NO

Q25n. What is the name of each spray you used on your body or uniform?

**A**

01 Aip  
02 Alfaron  
03 Apache

**B**

04 Bacillus thurengiensis  
and Tecknar  
05 Baygon  
06 Boric Acid

**C**

07 Chigg-Away  
08 Combat  
09 Cutter

**D**

10 D-Con  
11 DDT  
12 DEET  
13 Deltamethrin  
14 Demon  
15 Diazinon  
16 Di-Blox  
17 Dursban

**E**

18 Erase

**F**

19 Ficam  
20 Final  
21 Flea collar  
22 Fumitoxin  
23 Flytek

**G**

24 Golden Marlin

**H**

25 Hornet/Wasp Killer

**I**

None listed

**J**

None listed

**K**

None listed

**L**

26 Lindane

**M**

27 Maki  
28 Malathion

**N**

30 No-Pest Strips

**O**

31 Off Insect Repellent  
32 O-R-500

**P**

33 Paraphos  
34 Parathion  
35 PCQ  
36 Penta  
37 Permenone  
38 Phostoxin  
39 Pival  
40 Pivaldione  
41 Pyrenone

**Q**

None listed

**R**

42 RAID  
43 Roach motel  
44 Rodent Cake  
45 Rozol

**S**

46 Sevin  
47 Skin-So-Soft  
48 Snip  
49 Stimulkil (Saudi product)

**T**

50 Talon  
51 Tick collar  
52 Tossit  
53 Tri-Ban

**U**

None listed

**V**

54 Valone

**W**

None listed

**X**

None listed

**Y**

None listed

**Z**

None listed

**3**

55 3 M

**6**

56 6 / 12

98 Group – Can't ID

99 **Other – Specify**

ENTER CODE FOR:  
1<sup>ST</sup> PESTICIDE

2<sup>ND</sup> PESTICIDE

3<sup>RD</sup> PESTICIDE

Q25intro. [IF Q25i = 1 ASK]  
I'd like to ask you about each of these sprays separately.

[IF Q25i = 2 ASK]  
I'd like to ask you about the one you used separately. Then I'll ask about the other spray you used.

[IF Q25i = 0 ASK]  
I'd like to ask you about your use of these sprays.

[IF Q25 = 1 ASK]  
I'd like to ask you about this spray.

Q25b. [IF Q25n @1 = d GO TO Q26]

[IF Q25n @1 = 98 GO TO Q26]

[IF Q25n @1  $\geq$  1 AND Q25n @1 < 98 GO TO Q29]

FIRST SPRAY USED ON BODY / UNIFORM (Q26 - Q34c)

Q26. Did this spray have a particular smell?

1 YES → ASK Q27

0 NO → GO TO Q29

Q27. Did it smell like [READ LIST]?

01 Cooking oil,

02 Rotten eggs or sulfur,

03 Gasoline,

04 Kerosene,

05 Chemicals,

06 Insecticides,

07 Something sweet,

08 Something musty, or

09 Something else? → How would you describe this odor? \_\_\_\_\_

10 Multiple smells (specify)

Q29. Did you spray your uniform, your body, or both?

(Mark One)

- 1 UNIFORM
- 2 BODY
- 3 BOTH UNIFORM AND BODY

Q30. Where did you get this spray? Was it . . . [READ LIST]?

- 01 US military issued,
- 02 from the PX,
- 03 from the US (something you brought with you from the US, from a friend or relative in the US, etc.)
- 04 from fellow US soldiers,
- 05 from international soldiers or a local source (Allied / International Soldiers, local contractors, or other non-US source: Saudis, Turks, Bahraini, Egyptians, Syrians),
- 06 or from some other source? → DESCRIBE: \_\_\_\_\_
- 07 DON'T KNOW

Q31. During [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A], how often did you use this spray?

[ ] EVERYDAY

OR

\_\_\_\_\_ TIMES

PER: DAY

WEEK

MONTH

SOME OTHER PERIOD: \_\_\_\_\_

Q31A. On the days that you used this spray in [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A], did you use it . . . [READ LIST]

- 1 Once a day,
- 2 Twice a day,
- 3 Three times a day, or
- 4 Four or more times a day?

IF Q31 = EVERYDAY, GO TO Q33.

Q32. Did you stop using this spray during [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A] because [READ LIST]? (Mark "1" Yes or "0" No for Each Item)

	<u>Yes</u>	<u>No</u>
a. Pests stopped being a problem, because	1	0
b. You ran out of pesticides, or	1	0
c. For any other reason?	1	0

Describe: \_\_\_\_\_

Q33. Did you experience any side effects from this spray?

- 1 YES → ASK Q34  
0 NO → GO TO CATI CHECK AFTER Q34

Q34. During this period, did you stop using this spray or reduce the amount you used because of side effects?

- 1 YES  
0 NO

CATI CHECK: REPEAT QUESTIONS 26 – 34 FOR THE 2<sup>ND</sup> AND 3<sup>RD</sup> PESTICIDE SPRAYS. INTERVIEWER SHOULD SAY: Now let's talk about the (2<sup>nd</sup> / 3<sup>rd</sup>) spray you used at that time. OTHERS, GO TO NEXT CATI CHECK.

Q26b. [IF Q25n @2 = 98 SAY] Now let's talk about the group of sprays you mentioned.

[OTHERWISE ASK:]

Now let's talk about the second spray you used at that time.

Did this spray have a particular smell?

- 1 YES → ASK Q27b  
0 NO → GO TO Q29b



Q27b. Did it smell like [READ LIST]?

- 01 Cooking oil,
- 02 Rotten eggs or sulfur,
- 03 Gasoline,
- 04 Kerosene,
- 05 Chemicals,
- 06 Insecticides,
- 07 Something sweet,
- 08 Something musty, or
- 09 Something else? → How would you describe this odor? \_\_\_\_\_
- 10 Multiple smells (specify)

Q29b. Did you spray your uniform, your body, or both?

(Mark One)

- 1 UNIFORM
- 2 BODY
- 3 BOTH UNIFORM AND BODY

Q30b. Where did you get this spray? Was it . . . [READ LIST]?

- 01 US military issued,
- 02 from the PX,
- 03 from the US (something you brought with you from the US, from a friend or relative in the US, etc.)
- 04 from fellow US soldiers,
- 05 from international soldiers or a local source (Allied / International Soldiers, local contractors, or other non-US source: Saudis, Turks, Bahraini, Egyptians, Syrians),
- 06 or from some other source? → DESCRIBE: \_\_\_\_\_
- 07 DON'T KNOW

Q31b. During [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A], how often did you use this spray?

[ ] EVERYDAY

OR

\_\_\_\_\_ TIMES

PER: DAY  
WEEK  
MONTH

SOME OTHER PERIOD: \_\_\_\_\_

Q31Ab. On the days that you used this spray in [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A], did you use it . . . [READ LIST]

- 1 Once a day,
- 2 Twice a day,
- 3 Three times a day, or
- 4 Four or more times a day?

IF Q31b = EVERYDAY, GO TO Q33b.

Q32b. Did you stop using this spray during [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A] because [READ LIST]?

(Mark "1" Yes or "0" No for Each Item)

	<u>Yes</u>	<u>No</u>
a. Pests stopped being a problem, because	1	0
b. You ran out of pesticides, or	1	0
c. For any other reason?	1	0
Describe: _____		

Q33b. Did you experience any side effects from this spray during [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A]?

- 1 YES → ASK Q34b
- 0 NO → GO TO CATI CHECK AFTER Q34b

Q34b. During this period, did you stop using this spray or reduce the amount you used because of side effects?

- 1 YES
- 0 NO

Now let's talk about the 3<sup>rd</sup> spray you used at that time. OTHERS, GO TO NEXT CATI CHECK.

Q26c. Did this spray have a particular smell?

- 1 YES → ASK Q27c
- 0 NO → GO TO Q29c

Q27c. Did it smell like [READ LIST]?

- 01 Cooking oil,
- 02 Rotten eggs or sulfur,
- 03 Gasoline,
- 04 Kerosene,
- 05 Chemicals,
- 06 Insecticides,
- 07 Something sweet,
- 08 Something musty, or
- 09 Something else? → How would you describe this odor? \_\_\_\_\_
- 10 Multiple smells (specify)

Q29c. Did you spray your uniform, your body, or both?

- 1 UNIFORM
- 2 BODY
- 3 BOTH UNIFORM AND BODY

Q30c. Where did you get this spray? Was it . . . [READ LIST]?

- 01 US military issued,
- 02 from the PX,
- 03 from the US (something you brought with you from the US, from a friend or relative in the US, etc.)
- 04 from fellow US soldiers,
- 05 from international soldiers or a local source (Allied / International Soldiers, local contractors, or other non-US source: Saudis, Turks, Bahraini, Egyptians, Syrians),
- 06 or from some other source? → DESCRIBE: \_\_\_\_\_
- 07 DON'T KNOW

Q31c. During [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A], how often did you use this spray?

[ ] EVERYDAY

OR

\_\_\_\_\_TIMES

PER: DAY

WEEK

MONTH

SOME OTHER PERIOD: \_\_\_\_\_

Q31Ac. On the days that you used this spray in [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A], did you use it . . . [READ LIST]

- 1 Once a day,
- 2 Twice a day,
- 3 Three times a day, or
- 4 Four or more times a day?

IF Q31c = EVERYDAY, GO TO Q33c.

Q32c. Did you stop using this spray during [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A] because [READ LIST]? (Mark "1" Yes or "0" No for Each Item)

	<u>Yes</u>	<u>No</u>
a. Pests stopped being a problem, because	1	0
b. You ran out of pesticides, or	1	0
c. For any other reason?	1	0

Describe: \_\_\_\_\_

Q33c. Did you experience any side effects from this spray during [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A]?

- 1 YES → ASK Q34c
- 0 NO → GO TO CATI CHECK AFTER Q34c

Q34c. During this period, did you stop using this spray or reduce the amount you used because of side effects?

- 1 YES
- 0 NO

CATI CHECK Q24B-24F:

RESPONDENT USED A POWDER ON HIS BODY OR UNIFORM (Q24B = YES), ASK Q35.

RESPONDENT DID NOT USE A POWDER (Q24B = NO) BUT USED A LIQUID (Q24C = YES),  
GO TO Q45.

RESPONDENT DID NOT USE A POWDER (Q24B = NO) BUT USED A LOTION OR CREAM (Q24D = YES),  
GO TO Q55.

RESPONDENT DID NOT USE A POWDER (Q24B = NO) BUT USED A FLEA OR TICK COLLAR (Q24E = YES),  
GO TO Q69.

RESPONDENT DID NOT USE A POWDER (Q24B = NO) BUT USED SOME OTHER PESTICIDE (Q24F = YES), GO TO Q75.

PERSONAL USE OF POWDERS

Q35. You mentioned using a powder on your body or uniform to kill or control pests. How many types of powders did you use on your body or uniform at that time?

- 1 1
- 2 2
- 3 3
- 4 4 OR MORE

CATI CHECK: IF Q35 = 1, GO TO Q35r

Q35i. Can you remember your usage of these powders individually, or did you use these powders so interchangeably during [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A] that in thinking back you can't tell them apart? During this period, did you stop using this powder or reduce the amount you used because of side effects?

- 1 REMEMBER INDIVIDUALLY
- 0 USED ALL INTERCHANGEABLY
- 2 SOME INDIVIDUALLY / SOME INTERCHANGEABLY

Q35r. Do you remember the name of the powder(s) you used in [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A]?

(Mark One)

- 1 YES → ASK Q35n
- 0 NO → GO TO Q36

Q35n. What is the name of each powder you used on your body or uniform?

[ SEE PESTICIDE LIST – page 22 ]

Q35intro. [IF Q35i = 1 AND Q35 ≥ 2 ASK]  
I'd like to ask you about each of these powders separately.

[IF Q35i = 0 AND Q35 ≥ 2 ASK]  
I'd like to ask you about your use of these powders.

[IF Q35i = 2 AND Q35 ≥ 2 ASK]  
I'd like to ask you about the one you used separately. Then I'll ask about the other powder you used.

[IF Q35 = 1 ASK]  
I'd like to ask you about this powder.

Q35b. [IF Q35n @1 = d GO TO Q36]

[IF Q35n @1 = 98 GO TO Q36]

[IF Q35n @1 ≥ 1 AND Q35n @1 < 98 GO TO Q39]

FIRST POWDER USED ON BODY / UNIFORM (Q35 – Q44)

Q36. Did this powder have a particular smell?

1 YES → ASK Q37

0 NO → GO TO Q38

Q37. Did it smell like [READ LIST]?

01 Cooking oil,

02 Rotten eggs or sulfur,

03 Gasoline,

04 Kerosene,

05 Chemicals,

06 Insecticides,

07 Something sweet,

08 Something musty, or

09 Something else? → How would you describe this odor? \_\_\_\_\_

10 Multiple smells (specify)

Q38. What color (was this / were these) powder(s)?

- 01 COLORLESS / CLEAR
- 02 DARK BROWN
- 03 LIGHT BROWN
- 04 GREY
- 05 ORANGE
- 06 RED
- 07 WHITE
- 08 OPAQUE / CLOUDY / MILKY
- 09 YELLOW
- 10 OTHER → DESCRIBE: \_\_\_\_\_
- 11 MORE THAN ONE COLOR (USE FOR GROUPS)

Q39. Did you put this powder on your uniform, your body, or both?

- 1 UNIFORM
- 2 BODY
- 3 BOTH UNIFORM AND BODY

Q40. Where did you get this powder? Was it . . . [READ LIST]?

- 01 US military issued,
- 02 from the PX,
- 03 from the US (something you brought with you from the US, from a friend or relative in the US, etc.)
- 04 from fellow US soldiers,
- 05 from international soldiers or a local source (Allied / International Soldiers, local contractors, or other non-US source: Saudis, Turks, Bahraini, Egyptians, Syrians),
- 06 or from some other source? → DESCRIBE: \_\_\_\_\_
- 07 DON'T KNOW

FIRST POWDER USED ON BODY / UNIFORM (Q35 - Q44)

Q41. During [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A], how often did you use this powder?

[ ] EVERYDAY

OR

\_\_\_\_\_ TIMES

PER: DAY

WEEK

MONTH

SOME OTHER PERIOD: \_\_\_\_\_

Q41A. On the days that you used this powder, did you use it . . . [READ LIST]

- 1 Once a day,
- 2 Twice a day,
- 3 Three times a day, or
- 4 Four or more times a day?

IF Q41 = EVERYDAY, GO TO Q43.

Q42. Did you stop using this powder during [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A] because [READ LIST]? (Mark "1" Yes or "0" No for Each Item)

	<u>Yes</u>	<u>No</u>
a. Pests stopped being a problem; because	1	0
b. You ran out of pesticides; or	1	0
c. for any other reason?	1	0
Describe: _____		

Q43. Did you experience any side effects from using this powder during [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A]?

- 1 YES → ASK Q44
- 0 NO → GO TO CATI CHECK AFTER Q44

Q44. During this period, did you stop using this powder or reduce the amount you used because of the side effects?

- 1 YES
- 0 NO



CATI CHECK: REPEAT QUESTIONS 36 – 44 FOR THE 2<sup>ND</sup> AND 3<sup>RD</sup> POWDERS.

INTERVIEWER SHOULD SAY: Now I'd like to ask about the (2<sup>nd</sup> / 3<sup>rd</sup>) powder that you used at that time.

OTHERS GO TO NEXT CATI CHECK.

Q36b. [IF Q35n @2 = 98 ASK] Now let's talk about the group of powders you mentioned.

[OTHERWISE ASK:]

Now let's talk about the second powder [FILL NAME] you used at that time.

Did this powder have a particular smell?

1 YES → ASK Q37b

0 NO → GO TO Q38b

Q37b. Did it smell like [READ LIST]?

01 Cooking oil,

02 Rotten eggs or sulfur,

03 Gasoline,

04 Kerosene,

05 Chemicals,

06 Insecticides,

07 Something sweet,

08 Something musty, or

09 Something else? → How would you describe this odor? \_\_\_\_\_

10 Multiple smells (specify)

Q38b. \_\_\_\_\_ What color was this powder?

01 COLORLESS / CLEAR

02 DARK BROWN

03 LIGHT BROWN

04 GREY

05 ORANGE

06 RED

07 WHITE

08 OPAQUE / CLOUDY / MILKY

09 YELLOW

10 OTHER → DESCRIBE: \_\_\_\_\_

11 MORE THAN ONE COLOR (USE FOR GROUPS)

Q39b. Did you apply this powder to your uniform, your body, or both?

- 1 UNIFORM
- 2 BODY
- 3 BOTH UNIFORM AND BODY

Q40b. Where did you get this powder? Was it . . . [READ LIST]?

- 01 US military issued,
- 02 from the PX,
- 03 from the US (something you brought with you from the US, from a friend or relative in the US, etc.)
- 04 from fellow US soldiers,
- 05 from international soldiers or a local source (Allied / International Soldiers, local contractors, or other non-US source: Saudis, Turks, Bahraini, Egyptians, Syrians),
- 06 or from some other source? → DESCRIBE: \_\_\_\_\_
- 07 DON'T KNOW

Q41b. During [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A], how often did you use this powder?

[ ] EVERYDAY  
OR

\_\_\_\_\_ TIMES

PER: DAY  
WEEK  
MONTH

SOME OTHER PERIOD: \_\_\_\_\_

Q41Ab. On the days that you used this powder in [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A], did you use it . . . [READ LIST]

- 1 Once a day,
- 2 Twice a day,
- 3 Three times a day, or
- 4 Four or more times a day?

IF Q41b = EVERYDAY, GO TO Q43b.

Q42b. Did you stop using this powder during [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A] because [READ LIST]? (Mark "1" Yes or "0" No for Each Item)

Yes

No

- |   |   |   |
|---|---|---|
| a. Pests stopped being a problem, because | 1 | 0 |
| b. You ran out of pesticides, or          | 1 | 0 |
| c. For any other reason?                  | 1 | 0 |

Describe: \_\_\_\_\_

Q43b. Did you experience any side effects from this powder?

- 1 YES → ASK Q44b  
0 NO → GO TO CATI CHECK AFTER Q44b

Q44b. During this period, did you stop using this powder or reduce the amount you used because of side effects?

- 1 YES  
0 NO

CATI CHECK PWDb:

[IF Q35 = 2 GO TO NEXT CATI CHECK]

[IF Q35n @2 = 98 GO TO NEXT CATI CHECK]

[IF Q35n @3 = 98 GO TO Q35c]

[IF Q35n @3 = d GO TO Q36c]

[IF Q35n @3 ≥ 1 AND Q35n @3 < 98 GO TO Q39c]

Now let's talk about the 3<sup>rd</sup> powder you used at that time. OTHERS, GO TO NEXT CATI CHECK.

Q36c. Did this powder have a particular smell?

- 1 YES → ASK Q37c  
0 NO → GO TO Q38c

Q37c. Did it smell like [READ LIST]?

- 01 Cooking oil,  
02 Rotten eggs or sulfur,  
03 Gasoline,  
04 Kerosene,  
05 Chemicals,  
06 Insecticides,  
07 Something sweet,

- 08      Something musty, or
- 09      Something else? → How would you describe this odor? \_\_\_\_\_
- 10      Multiple smells (specify)

Q38c.    What color was this powder?

- 01      COLORLESS / CLEAR
- 02      DARK BROWN
- 03      LIGHT BROWN
- 04      GREY
- 05      ORANGE
- 06      RED
- 07      WHITE
- 08      OPAQUE / CLOUDY / MILKY
- 09      YELLOW
- 10      OTHER → DESCRIBE: \_\_\_\_\_
- 11      MORE THAN ONE COLOR (USE FOR GROUPS)

Q39c.    Did you put this powder your uniform, your body, or both?

- 1      UNIFORM
- 2      BODY
- 3      BOTH UNIFORM AND BODY

Q40c.    Where did you get this powder? Was it . . . [READ LIST]?

- 01    US military issued,
- 02    from the PX,
- 03    from the US (something you brought with you from the US, from a friend or relative in the US, etc.)
- 04    from fellow US soldiers,
- 05    from international soldiers or a local source (Allied / International Soldiers, local contractors, or other non-US source: Saudis, Turks, Bahraini, Egyptians, Syrians),
- 06    or from some other source? → DESCRIBE: \_\_\_\_\_
- 07    DON'T KNOW

Q41c. During [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A], how often did you use this powder?

[ ] EVERYDAY

OR

\_\_\_\_\_ TIMES

PER: DAY

WEEK

MONTH

SOME OTHER PERIOD: \_\_\_\_\_

Q41Ac. On the days that you used this powder in [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A], did you use it . . . [READ LIST]

- 1 Once a day,
- 2 Twice a day,
- 3 Three times a day, or
- 4 Four or more times a day?

IF Q41c = EVERYDAY, GO TO Q43c.

Q42c. Did you stop using this powder during [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A] because [READ LIST]? (Mark "1" Yes or "0" No for Each Item)

	<u>Yes</u>	<u>No</u>
a. Pests stopped being a problem, because	1	0
b. You ran out of pesticides, or	1	0
c. For any other reason?	1	0
Describe: _____		

Q43c. Did you experience any side effects from this powder?

- 1 YES → ASK Q44c
- 0 NO → GO TO CATI CHECK AFTER Q44c

Q44c. During this period, did you stop using this powder or reduce the amount you used because of side effects?

- 1 YES
- 0 NO

CATI CHECK Q24C:

RESPONDENT USED A LIQUID ON HIS BODY OR UNIFORM (Q24C = YES), ASK Q45.

RESPONDENT DID NOT USE A LIQUID (Q24C = NO) BUT USED A LOTION OR CREAM ON HIS BODY OR UNIFORM (Q24D = YES), ASK Q55.

RESPONDENT DID NOT USE A LIQUID (Q24C = NO) BUT USED A FLEA OR TICK COLLAR (Q24E = YES), GO TO Q69.

RESPONDENT DID NOT USE A LIQUID (Q24C = NO) BUT USED SOME OTHER PESTICIDE (Q24F = YES), GO TO Q75.

PERSONAL USE OF LIQUIDS

Q45. You mentioned using liquids on your body or uniform to kill or control pests. How many different liquids did you use on your body or uniform at that time?

- 1 1
- 2 2
- 3 3
- 4 4 OR MORE

CATI CHECK: IF Q45 = 1, GO TO Q45r

Q45i. Can you remember your usage of these liquids individually, or did you use these liquids so interchangeably during [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A] that in thinking back you can't tell them apart?

- 1 REMEMBER INDIVIDUALLY
- 0 USED ALL INTERCHANGEABLY
- 2 SOME INDIVIDUALLY / SOME INTERCHANGEABLY

Q45r. Do you remember the name of the liquid(s) you used in [RANDOM DATE OR DATES IN Q11A]?  
(Mark One)

- 1 YES → ASK Q45n
- 0 NO

Q45n. What is the name of the/each liquid you used on your body or uniform?

[ SEE PESTICIDE LIST – page 22 ]

Q45intro. [IF Q45i = 1 ASK]  
I'd like to ask you about each of these liquids separately.

[IF Q45i = 0 ASK]  
I'd like to ask you about your use of these liquids.

FIRST LIQUID USED ON BODY / UNIFORM (Q46 – Q54)

Q46. Did this liquid have a particular smell?

- 1 YES → ASK Q47
- 0 NO → GO TO Q48

Q47. Did it smell like [READ LIST]?

- 01 Cooking oil,
- 02 Rotten eggs or sulfur,
- 03 Gasoline,
- 04 Kerosene,
- 05 Chemicals,
- 06 Insecticides,
- 07 Something sweet,
- 08 Something musty, or
- 09 Something else? → How would you describe this odor? \_\_\_\_\_
- 10 Multiple smells (specify)

Q48. What color (was this / were these) liquid(s)?

- 01 COLORLESS / CLEAR
- 02 DARK BROWN
- 03 LIGHT BROWN
- 04 GREY
- 05 ORANGE
- 06 RED
- 07 WHITE
- 08 OPAQUE / CLOUDY / MILKY
- 09 YELLOW
- 10 OTHER → DESCRIBE: \_\_\_\_\_
- 11 MORE THAN ONE COLOR (USE FOR GROUPS)

Q49. Did you put this liquid on your uniform, your body, or both?

- 1 UNIFORM
- 2 BODY
- 3 BOTH UNIFORM AND BODY

Q50. Where did you get this liquid? Was it . . . [READ LIST]?

- 01 US military issued,
- 02 from the PX,
- 03 from the US (something you brought with you from the US, from a friend or relative in the US, etc.)
- 04 from fellow US soldiers,
- 05 from international soldiers or a local source (Allied / International Soldiers, local contractors, or other non-US source: Saudis, Turks, Bahraini, Egyptians, Syrians),
- 06 or from some other source? → DESCRIBE: \_\_\_\_\_
- 07 DON'T KNOW

FIRST LIQUID USED ON BODY / UNIFORM (Q46 – Q54)

Q51. During [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A], how often did you use this liquid?

[ ] EVERYDAY

OR

\_\_\_\_\_ TIMES

PER: DAY  
WEEK  
MONTH

SOME OTHER PERIOD: \_\_\_\_\_

Q51A. On the days that you used this liquid in [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A], did you use it . . . [READ LIST]?

- 1 Once a day,
- 2 Twice a day,
- 3 Three times a day, or
- 4 Four or more times a day?

IF Q51 = EVERYDAY, GO TO Q53.



Q52. Did you stop using this liquid during [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A] because [READ LIST]? (Mark "1" Yes or "0" No for Each Item)

	<u>Yes</u>	<u>No</u>
a. Pests stopped being a problem, because	1	0
b. You ran out of pesticides, or	1	0
c. for any other reason?	1	0

Describe: \_\_\_\_\_

Q53. Did you experience any side effects from using this liquid?

1 YES → ASK Q54

0 NO → GO TO CATI CHECK AFTER Q54

Q54. Did you stop using this liquid or reduce the amount you used because of the side effects?

1 YES

0 NO

CATI CHECK: REPEAT QUESTIONS 46 – 54 FOR THE 2<sup>ND</sup> AND 3<sup>RD</sup> LIQUIDS. INTERVIEWER SHOULD SAY: Let's talk about the 2<sup>nd</sup> liquid that you used on your body or uniform.

OTHERS, GO TO CATI CHECK BEFORE Q55.

Q46b. [IF Q45n @2 = 98 ASK] Now let's talk about the group of liquids you mentioned.

[OTHERWISE ASK:]

Now let's talk about the second liquid [FILL NAME] you used at that time.

Did this liquid have a particular smell?

1 YES → ASK Q47b

0 NO → GO TO Q48b

Q47b. Did it smell like [READ LIST]?

01 Cooking oil,

02 Rotten eggs or sulfur,

03 Gasoline,

04 Kerosene,

05 Chemicals,

06 Insecticides,

07 Something sweet,

08 Something musty, or

09 Something else? → How would you describe this odor? \_\_\_\_\_

10 Multiple smells (specify)

Q48b. What color was this liquid?

- 01 COLORLESS / CLEAR
- 02 DARK BROWN
- 03 LIGHT BROWN
- 04 GREY
- 05 ORANGE
- 06 RED
- 07 WHITE
- 08 OPAQUE / CLOUDY / MILKY
- 09 YELLOW
- 10 OTHER → DESCRIBE: \_\_\_\_\_
- 11 MORE THAN ONE COLOR (USE FOR GROUPS)

Q49b. Did you apply this liquid to your uniform, your body, or both?

- 1 UNIFORM
- 2 BODY
- 3 BOTH UNIFORM AND BODY

Q50b. Where did you get this liquid? Was it . . . [READ LIST]?

- 01 US military issued,
- 02 from the PX,
- 03 from the US (something you brought with you from the US, from a friend or relative in the US, etc.)
- 04 from fellow US soldiers,
- 05 from international soldiers or a local source (Allied / International Soldiers, local contractors, or other non-US source: Saudis, Turks, Bahraini, Egyptians, Syrians),
- 06 or from some other source? → DESCRIBE: \_\_\_\_\_
- 07 DON'T KNOW

Q51b. During [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A], how often did you use this liquid?

[ ] EVERYDAY  
OR

\_\_\_\_\_ TIMES

PER: DAY

WEEK  
MONTH  
SOME OTHER PERIOD: \_\_\_\_\_

Q51Ab. On the days that you used this liquid in [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A], did you use it . . . [READ LIST]

- 1 Once a day,
- 2 Twice a day,
- 3 Three times a day, or
- 4 Four or more times a day?

IF Q51b = EVERYDAY, GO TO Q53b.

Q52b. Did you ever stop using this liquid during [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A] because [READ LIST]? (Mark "1" Yes or "0" No for Each Item)

	<u>Yes</u>	<u>No</u>
a. Pests stopped being a problem, because	1	0
b. You ran out of pesticides, or	1	0
c. For any other reason?	1	0
Describe: _____		

Q53b. Did you experience any side effects from this liquid during [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A]?

- 1 YES → ASK Q54b
- 0 NO → GO TO CATI CHECK AFTER Q54b

Q54b. During this period, did you stop using this liquid or reduce the amount you used because of side effects?

- 1 YES
- 0 NO

CATI CHECK CRMb:

[IF Q45 = 2 GO TO NEXT CATI CHECK]

[IF Q45n @2 = 98 GO TO NEXT CATI CHECK]

[IF Q45n @3 = 98 OR d GO TO Q46c]

[IF Q45n @3 ≥ 1 AND Q45n @3 < 98 GO TO Q49c]

Now let's talk about the 3<sup>rd</sup> liquid you used at that time. OTHERS, GO TO NEXT CATI CHECK.

Q46c. Did this liquid have a particular smell?

- 1 YES → ASK Q47c
- 0 NO → GO TO Q48c

Q47c. Did it smell like [READ LIST]?

- 01 Cooking oil,
- 02 Rotten eggs or sulfur,
- 03 Gasoline,
- 04 Kerosene,
- 05 Chemicals,
- 06 Insecticides,
- 07 Something sweet,
- 08 Something musty, or
- 09 Something else? → How would you describe this odor? \_\_\_\_\_
- 10 Multiple smells (specify)

Q48c. What color was this liquid?

- 01 COLORLESS / CLEAR
- 02 DARK BROWN
- 03 LIGHT BROWN
- 04 GREY
- 05 ORANGE
- 06 RED
- 07 WHITE
- 08 OPAQUE / CLOUDY / MILKY
- 09 YELLOW
- 10 OTHER → DESCRIBE: \_\_\_\_\_
- 11 MORE THAN ONE COLOR (USE FOR GROUP)

Q49c. Did you put this liquid your uniform, your body, or both?

- 1 UNIFORM
- 2 BODY
- 3 BOTH UNIFORM AND BODY

Q50c. Where did you get this liquid? Was it . . . [READ LIST]?

- 01 US military issued,
- 02 from the PX,
- 03 from the US (something you brought with you from the US, from a friend or relative in the US, etc.)
- 04 from fellow US soldiers,
- 05 from international soldiers or a local source (Allied / International Soldiers, local contractors, or other non-US source: Saudis, Turks, Bahraini, Egyptians, Syrians),
- 06 or from some other source? → DESCRIBE: \_\_\_\_\_
- 07 DON'T KNOW

Q51c. During [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A], how often did you use this liquid?

[ ] EVERYDAY

OR

\_\_\_\_\_ TIMES

PER: DAY  
WEEK  
MONTH

SOME OTHER PERIOD: \_\_\_\_\_

Q51Ac. On the days that you used this liquid in [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A], did you use it . . . [READ LIST]

- 1 Once a day,
- 2 Twice a day,
- 3 Three times a day, or
- 4 Four or more times a day?

IF Q51c = EVERYDAY, GO TO Q53c.

Q52c. Did you ever stop using this liquid during [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A] because [READ LIST]? (Mark "1" Yes or "0" No for Each Item)

	<u>Yes</u>	<u>No</u>
a. Pests stopped being a problem, because	1	0
b. You ran out of pesticides, or	1	0
c. For any other reason?	1	0

Describe: \_\_\_\_\_

Q53c. Did you experience any side effects from this liquid during [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A]?

1 YES → ASK Q54c

0 NO → GO TO CATI CHECK AFTER Q54c

Q54c. During this period, did you stop using this liquid or reduce the amount you used because of side effects?

1 YES

0 NO

#### CATI CHECK:

RESPONDENT USED A LOTION OR CREAM ON HIS BODY OR UNIFORM (Q24D = YES),  
ASK Q55.

RESPONDENT DID NOT USE A LOTION OR CREAM (Q24D = NO) BUT USED A FLEA OR TICK COLLAR  
(Q24E = YES), GO TO Q69.

RESPONDENT DID NOT USE A LOTION OR CREAM (Q24D = NO) BUT USED SOME OTHER PESTICIDE  
(Q24F = YES), GO TO Q75.

#### PERSONAL USE OF LOTIONS AND CREAMS

Q55. You mentioned using lotions and/or creams on your body or uniform to kill or control pests. How many different lotions or creams did you use on your body or uniform at that time?

1 1

2 2

3 3

4 4 OR MORE

CATI CHECK: IF Q55 = 1, GO TO Q55r

Q55i. Can you remember your usage of these lotions / creams individually, or did you use some of these lotions / creams so interchangeably during [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A] that in thinking back you can't tell them apart?

- 1 REMEMBER INDIVIDUALLY
- 0 USED ALL INTERCHANGEABLY
- 2 SOME INDIVIDUALLY / SOME INTERCHANGEABLY

Q55r. Do you remember the name of the lotion(s) / cream(s) you used in [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A]?

- 1 YES → ASK Q55n
- 0 NO

Q55n. What is the name of each lotion or cream you used on your body or uniform?

[ SEE PESTICIDE LIST – page 22 ]

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Q55intro. [IF Q55i = 1 ASK]  
I'd like to ask you about each of these lotions / creams separately.

[IF Q55i = 0 ASK]  
I'd like to ask you about your use of these lotions / creams.

FIRST LOTION OR CREAM USED ON BODY / UNIFORM (Q56 – Q64)

Q56. Did this lotion / cream have a particular smell?

- 1 YES → ASK Q57
- 0 NO → GO TO Q58

Q57. Did it smell like [READ LIST]?

- 01 Cooking oil,
- 02 Rotten eggs or sulfur,
- 03 Gasoline,
- 04 Kerosene,
- 05 Chemicals,
- 06 Insecticides,
- 07 Something sweet,
- 08 Something musty, or

- 09 Something else? → How would you describe this odor? \_\_\_\_\_
- 10 Multiple smells (specify)

Q58. What color (was this / were these) lotion(s) / cream(s)?

- 01 COLORLESS / CLEAR
- 02 DARK BROWN
- 03 LIGHT BROWN
- 04 GREY
- 05 ORANGE
- 06 RED
- 07 WHITE
- 08 OPAQUE / CLOUDY / MILKY
- 09 YELLOW
- 10 OTHER → DESCRIBE: \_\_\_\_\_
- 11 MORE THAN ONE COLOR (USE WITH GROUPS)

Q59. Did you put this lotion / cream on your uniform, your body, or both?

- 1 UNIFORM
- 2 BODY
- 3 BOTH UNIFORM AND BODY

Q60. Where did you get this lotion/cream? Was it . . . [READ LIST]?

- 01 US military issued,
- 02 from the PX,
- 03 from the US (something you brought with you from the US, from a friend or relative in the US, etc.)
- 04 from fellow US soldiers,
- 05 from international soldiers or a local source (Allied / International Soldiers, local contractors, or other non-US source: Saudis, Turks, Bahraini, Egyptians, Syrians),
- 06 or from some other source? → DESCRIBE: \_\_\_\_\_
- 07 DON'T KNOW



FIRST LOTION OR CREAM USED ON BODY / UNIFORM (Q56 – Q64)

Q61. During [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A], how often did you use this lotion or cream?

[ ] EVERYDAY

OR

\_\_\_\_\_ TIMES

PER: DAY

WEEK

MONTH

SOME OTHER PERIOD: \_\_\_\_\_

Q61A. On the days that you used this lotion / cream, did you use it [READ LIST]?

- 1 Once a day,
- 2 Twice a day,
- 3 Three times a day, or
- 4 Four or more times a day?

IF Q61 = EVERYDAY, GO TO Q63.

Q62. Did you stop using this lotion/cream during [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A] because [READ LIST]? (Mark "1" Yes or "0" No for Each Item)

	<u>Yes</u>	<u>No</u>
a. Pests stopped being a problem, because	1	0
b. you ran out of pesticides, or	1	0
c. for any other reason?	1	0
Describe: _____		

Q63. Did you experience any side effects from using this lotion or cream?

- 1 YES → ASK Q64
- 0 NO → GO TO CATI CHECK AFTER Q64

Q64. Did you stop using this lotion or cream, or reduce the amount you used because of the side effects?

- 1 YES
- 0 NO

CATI CHECK: REPEAT QUESTIONS 56 – 64 FOR THE 2<sup>ND</sup> AND 3<sup>RD</sup> LOTION OR CREAM. INTERVIEWER SHOULD SAY: Let's talk about the 2<sup>nd</sup> lotion or cream that you used on your body or uniform.

OTHERS, GO TO CATI CHECK BEFORE Q69.

Q56b. [IF Q55n @2 = 98 ASK] Now let's talk about the group of lotions / creams you mentioned.

[OTHERWISE ASK:]

Now let's talk about the second lotion / cream [FILL NAME] you used at that time.

Did this lotion / cream have a particular smell?

- 1 YES → ASK Q57b
- 0 NO → GO TO Q58b

Q57b. Did it smell like [READ LIST]?

- 01 Cooking oil,
- 02 Rotten eggs or sulfur,
- 03 Gasoline,
- 04 Kerosene,
- 05 Chemicals,
- 06 Insecticides,
- 07 Something sweet,
- 08 Something musty, or
- 09 Something else? → How would you describe this odor? \_\_\_\_\_
- 10 Multiple smells (specify)

Q58b. What color was this lotion / cream?

- 01 COLORLESS / CLEAR
- 02 DARK BROWN
- 03 LIGHT BROWN
- 04 GREY
- 05 ORANGE
- 06 RED
- 07 WHITE
- 08 OPAQUE / CLOUDY / MILKY
- 09 YELLOW
- 10 OTHER → DESCRIBE: \_\_\_\_\_
- 11 MORE THAN ONE COLOR (USE FOR GROUPS)

Q59b. Did you apply this lotion / cream to your uniform, your body, or both?

- 1 UNIFORM
- 2 BODY
- 3 BOTH UNIFORM AND BODY

Q60b. Where did you get this lotion/cream? Was it . . . [READ LIST]?

- 01 US military issued,
- 02 from the PX,
- 03 from the US (something you brought with you from the US, from a friend or relative in the US, etc.)
- 04 from fellow US soldiers,
- 05 from international soldiers or a local source (Allied / International Soldiers, local contractors, or other non-US source: Saudis, Turks, Bahraini, Egyptians, Syrians),
- 06 or from some other source? → DESCRIBE: \_\_\_\_\_
- 07 DON'T KNOW

Q61b. During [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A], how often did you use this lotion/cream?

[ ] EVERYDAY

OR

\_\_\_\_\_ TIMES

PER: DAY  
WEEK  
MONTH

SOME OTHER PERIOD: \_\_\_\_\_

Q61Ab. On the days that you used this lotion/cream in [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A], did you use it [READ LIST]

- 1 Once a day,
- 2 Twice a day,
- 3 Three times a day, or
- 4 Four or more times a day?

IF Q61b = EVERYDAY, GO TO Q63b.

Q62b. Did you ever stop using this lotion/cream during [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A] because [READ LIST]? (Mark "1" Yes or "0" No for Each Item)

	<u>Yes</u>	<u>No</u>
a. Pests stopped being a problem, because	1	0
b. You ran out of pesticides, or	1	0
c. For any other reason?	1	0

Describe: \_\_\_\_\_

Q63b. Did you experience any side effects from this lotion / cream?

1 YES → ASK Q64b

0 NO → GO TO CATI CHECK AFTER Q64b

Q64b. Did you stop using this lotion / cream or reduce the amount you used because of side effects?

1 YES

0 NO

Now let's talk about the 3<sup>rd</sup> lotion/cream you used at that time. OTHERS, GO TO NEXT CATI CHECK.

Q56c. Did this lotion / cream have a particular smell?

1 YES → ASK Q57c

0 NO → GO TO Q58c

Q57c. Did it smell like [READ LIST]?

01 Cooking oil,

02 Rotten eggs or sulfur,

03 Gasoline,

04 Kerosene,

05 Chemicals,

06 Insecticides,

07 Something sweet,

08 Something musty, or

09 Something else? → How would you describe this odor? \_\_\_\_\_

10 Multiple smells (specify)

Q58c. What color was this lotion / cream?

- 01 COLORLESS / CLEAR
- 02 DARK BROWN
- 03 LIGHT BROWN
- 04 GREY
- 05 ORANGE
- 06 RED
- 07 WHITE
- 08 OPAQUE / CLOUDY / MILKY
- 09 YELLOW
- 10 OTHER → DESCRIBE: \_\_\_\_\_
- 11 MORE THAN ONE COLOR (USE FOR GROUPS)

Q59c. Did you apply this lotion / cream on your uniform, your body, or both?

- 1 UNIFORM
- 2 BODY
- 3 BOTH UNIFORM AND BODY

Q60c. Where did you get this lotion/cream? Was it . . . [READ LIST]?

- 01 US military issued,
- 02 from the PX,
- 03 from the US (something you brought with you from the US, from a friend or relative in the US, etc.)
- 04 from fellow US soldiers,
- 05 from international soldiers or a local source (Allied / International Soldiers, local contractors, or other non-US source: Saudis, Turks, Bahraini, Egyptians, Syrians),
- 06 or from some other source? → DESCRIBE: \_\_\_\_\_
- 07 DON'T KNOW

Q61c. During [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A], how often did you use this lotion/cream?

[ ] EVERYDAY

OR

\_\_\_\_\_ TIMES

PER: DAY

WEEK

MONTH

SOME OTHER PERIOD: \_\_\_\_\_

Q61Ac. On the days that you used this lotion/cream in [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A], did you use it . . . [READ LIST]

- 1 Once a day,
- 2 Twice a day,
- 3 Three times a day, or
- 4 Four or more times a day?

IF Q61c = EVERYDAY, GO TO Q63c.

Q62c. Did you stop using this lotion/cream during [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A] because [READ LIST]? (Mark "1" Yes or "0" No for Each Item)

	<u>Yes</u>	<u>No</u>
a. Pests stopped being a problem, because	1	0
b. you ran out of pesticides, or	1	0
c. for any other reason?	1	0

Describe: \_\_\_\_\_

Q63c. Did you experience any side effects from this lotion / cream?

- 1 YES → ASK Q64c
- 0 NO → GO TO CATI CHECK AFTER Q64c

Q64c. During this period, did you stop using this lotion / cream or reduce the amount you used because of side effects?

- 1 YES
- 0 NO

#### PERSONAL USE OF FLEA AND TICK COLLARS

CATI CHECK Q24E: RESPONDENT USED A FLEA OR TICK COLLAR ON HIS BODY OR UNIFORM, (Q24E = YES), ASK Q69.

RESPONDENT DID NOT USE A FLEA OR TICK COLLAR (Q24E = NO) BUT USED SOME OTHER PESTICIDE (Q24F = YES), GO TO Q75.

Q69. You mentioned using a flea or tick collar on your body or uniform to kill or control pests.

Where did you get this flea or tick collar? Was it . . . [READ LIST]?

- 01 US military issued,
- 02 from the PX,
- 03 from the US (something you brought with you from the US, from a friend or relative in the US, etc.)
- 04 from fellow US soldiers,
- 05 from international soldiers or a local source (Allied / International Soldiers, local contractors, or other non-US source: Saudis, Turks, Bahraini, Egyptians, Syrians),
- 06 or from some other source? → DESCRIBE: \_\_\_\_\_
- 07 DON'T KNOW

Q70. How did you use it? Did you . . . (Mark "1" Yes or "0" No for Each Item)

- 1 wear it directly on your skin,
- 2 wear it over your clothes (bandana, boot),
- 3 or use it some other way? – Please Describe: \_\_\_\_\_

Q71. During [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A], how often did you use a flea or tick collar?

[ ] EVERYDAY

OR

\_\_\_\_\_ TIMES

PER: DAY

WEEK

MONTH

SOME OTHER PERIOD: \_\_\_\_\_

IF Q71 = EVERYDAY, GO TO Q73

Q72. Did you stop using a flea or tick collar at any time during [RANDOM DATE OR DATES IN Q11A] because [READ LIST]? (Mark "1" Yes or "0" No for Each Item) READ LIST AS A WHOLE

	<u>Yes</u>	<u>No</u>
a. pests stopped being a problem, because	1	0
b. you ran out of pesticides, or	1	0
c. for any other reason?	1	0

Please describe: \_\_\_\_\_

Q73. Did you experience any side effects from using a flea or tick collar during [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A]?

- 1 YES → ASK Q74
- 0 NO → GO TO CATI CHECK BEFORE Q75

Q74. During this period, did you stop using flea and tick collars or used them less often because of the side effects?

- 1 YES
- 0 NO

PERSONAL USE OF OTHER PESTICIDES ON BODY OR UNIFORM

CATI CHECK Q24F:

RESPONDENT USED OTHER PESTICIDES ON HIS BODY OR UNIFORM, ASK Q75.  
OTHERS, GO TO NEXT CATI CHECK BEFORE Q95.

Q75. You mentioned earlier that you used another type of pesticide on your body or uniform that we haven't already talked about to kill or control pests. How many pesticides that we haven't already discussed did you use on your body or uniform during [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A]?

(Mark One)

- 1 1
- 2 2
- 3 3
- 4 4 OR MORE

CATI CHECK: IF Q75 = 1, GO TO Q75r

Q75i. Can you remember your usage of these other pesticides individually, or did you use them so interchangeably during [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A] that in thinking back you can't tell them apart?

- 1 REMEMBER INDIVIDUALLY
- 0 USED ALL INTERCHANGEABLY
- 2 SOME INDIVIDUALLY / SOME INTERCHANGEABLY



Q75r. Do you remember the name of the other pesticide(s) that you used?

1 YES → ASK Q75n

0 NO

Q75n. What are the names of each of these pesticides?

[ SEE PESTICIDE LIST – page 22 ]

---

Q75intro. [IF Q75i = 1 AND Q75 ≥ 2 ASK]  
I'd like to ask you about each of these other pesticides separately.

[IF Q75i = 0 AND Q75 ≥ 2 ASK]  
I'd like to ask you about your use of these other pesticides.

[IF Q75i = 2 AND Q75 ≥ 2 ASK]  
I'd like to ask you about the one you used separately. Then I'll ask about the other pesticide(s) you used.

[IF Q75 = 1 ASK]  
I'd like to ask you about this other pesticide.

Q75b. [IF Q75n @1 = d GO TO Q76]

[IF Q75n @1 = 98 GO TO Q76]

[IF Q75n @1 ≥ 1 AND Q75n @1 < 98 GO TO Q79]

OTHER PESTICIDES USED ON BODY / UNIFORM (Q76 – Q84)

Q76. Did this pesticide have a particular smell?

1 YES → ASK Q77

0 NO → GO TO Q78

Q77. Did it smell like [READ LIST]?

- 01 Cooking oil,
- 02 Rotten eggs or sulfur,
- 03 Gasoline,
- 04 Kerosene,
- 05 Chemicals,
- 06 Insecticides,
- 07 Something sweet,
- 08 Something musty, or
- 09 Something else? → How would you describe this odor?
- 10 Multiple smells (specify)

OTHER PESTICIDES USED ON BODY / UNIFORM (Q76 – Q84)

Q78. What color (was this / were these) other pesticide(s)?

- 01 COLORLESS / CLEAR
- 02 DARK BROWN
- 03 LIGHT BROWN
- 04 GREY
- 05 ORANGE
- 06 RED
- 07 WHITE
- 08 OPAQUE / CLOUDY / MILKY
- 09 YELLOW
- 10 OTHER → DESCRIBE: \_\_\_\_\_
- 11 MORE THAN ONE COLOR (USE FOR GROUPS)

Q79. Did you put it on your uniform, your body, or both?

- 1 UNIFORM
- 2 BODY
- 3 BOTH UNIFORM AND BODY

Q80. Where did you get (this / these) other pesticide(s)? Was it . . . [READ LIST]?

- 01 US military issued,
- 02 from the PX,
- 03 from the US (something you brought with you from the US, from a friend or relative in the US, etc.)
- 04 from fellow US soldiers,
- 05 from international soldiers or a local source (Allied / International Soldiers, local contractors, or other non-US source: Saudis, Turks, Bahraini, Egyptians, Syrians),
- 06 or from some other source? → DESCRIBE: \_\_\_\_\_
- 07 DON'T KNOW

Q81. During [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A], how often did you use (this / these) pesticide(s)?

[ ] EVERYDAY

OR

\_\_\_\_\_ TIMES

PER: DAY  
WEEK  
MONTH

SOME OTHER PERIOD: \_\_\_\_\_

OTHER PESTICIDES USED ON BODY / UNIFORM (Q76 – Q84)

Q81A. On the days that you used this other pesticide in [RANDOM MONTH], did you use it . . . [READ LIST]

- 1 Once a day,
- 2 Twice a day,
- 3 Three times a day, or
- 4 Four or more times a day?

IF Q81 = EVERYDAY, GO TO Q83.

Q82. Did you stop using this pesticide during [RANDOM DATE OR DATES IN Q11A] because [READ LIST]?  
(Mark "1" Yes or "0" No for Each Item) READ LIST

	<u>Yes</u>	<u>No</u>
a. Pests stopped being a problem, because	1	0
b. You ran out of pesticides, or	1	0
c. for any other reason?	1	0
Describe: _____		

Q83. Did you experience any side effects from this pesticide?

- 1 YES → ASK Q84
- 0 NO → GO TO CATI CHECK AFTER Q84

Q84. Did you stop using this pesticide or reduce the amount you used because of the side effects during [RANDOM DATES]?

- 1 YES
- 0 NO

CATI CHECK: REPEAT QUESTIONS 76 – 84 FOR THE 2<sup>ND</sup> AND 3<sup>RD</sup> PESTICIDES.

OTHERS GO TO NEXT CATI CHECK BEFORE Q95.

Q76b. [IF Q75n @2 = 98 ASK] Now let's talk about the group of other pesticides you mentioned.

[OTHERWISE ASK:]

Now let's talk about the second other pesticide you used at that time.

Did (this / these) pesticide(s) have a particular smell?

- 1 YES → ASK Q77b
- 0 NO → GO TO Q78b

Q77b. Did (it / they) smell like [READ LIST]?

- 01 Cooking oil,
- 02 Rotten eggs or sulfur,
- 03 Gasoline,
- 04 Kerosene,
- 05 Chemicals,
- 06 Insecticides,
- 07 Something sweet,
- 08 Something musty, or
- 09 Something else? → How would you describe this odor? \_\_\_\_\_
- 10 Multiple smells (specify)

Q78b. What color (was this / were these) pesticide(s)?

- 01 COLORLESS / CLEAR
- 02 DARK BROWN
- 03 LIGHT BROWN
- 04 GREY
- 05 ORANGE
- 06 RED
- 07 WHITE
- 08 OPAQUE / CLOUDY / MILKY
- 09 YELLOW
- 10 OTHER → DESCRIBE: \_\_\_\_\_
- 11 MORE THAN ONE COLOR (USE FOR GROUP)

Q79b. Did you put (this / these) pesticide(s) on your uniform, your body, or both?

- 1 UNIFORM
- 2 BODY
- 3 BOTH UNIFORM AND BODY

Q80b. Where did you get (this / these) pesticide(s)? Was it . . . [READ LIST]?

- 01 US military issued,
- 02 from the PX,
- 03 from the US (something you brought with you from the US, from a friend or relative in the US, etc.)
- 04 from fellow US soldiers,
- 05 from international soldiers or a local source (Allied / International Soldiers, local contractors, or other non-US source: Saudis, Turks, Bahraini, Egyptians, Syrians),
- 06 or from some other source? → DESCRIBE: \_\_\_\_\_
- 07 DON'T KNOW

Q81b. During [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A], how often did you use this pesticide?

[ ] EVERYDAY

OR

\_\_\_\_\_ TIMES

PER: DAY

WEEK

MONTH

SOME OTHER PERIOD: \_\_\_\_\_

Q81Ab. On the days that you used this pesticide in [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A], did you use it . . . [READ LIST]

- 1 Once a day,
- 2 Twice a day,
- 3 Three times a day, or
- 4 Four or more times a day?

IF Q81b = EVERYDAY, GO TO Q83b.

Q82b. Did you stop using this pesticide during [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A] because [READ LIST]? (Mark "1" Yes or "0" No for Each Item)

	<u>Yes</u>	<u>No</u>
a. Pests stopped being a problem, because	1	0
b. You ran out of pesticides, or	1	0
c. For any other reason?	1	0
Describe: _____		

Q83b. Did you experience any side effects from this pesticide?

- 1 YES → ASK Q84b
- 0 NO → GO TO CATI CHECK AFTER Q84b

Q84b. During this period, did you stop using this pesticide or reduce the amount you used because of side effects?

- 1 YES
- 0 NO

Now let's talk about the 3<sup>rd</sup> pesticide you used at that time. OTHERS, GO TO NEXT CATI CHECK.

Q76c. Did this pesticide have a particular smell?

- 1 YES → ASK Q77c
- 0 NO → GO TO Q78c

Q77c. Did it smell like [READ LIST]?

- 01 Cooking oil,
- 02 Rotten eggs or sulfur,
- 03 Gasoline,
- 04 Kerosene,
- 05 Chemicals,
- 06 Insecticides,
- 07 Something sweet,
- 08 Something musty, or
- 09 Something else? → How would you describe this odor? \_\_\_\_\_
- 10 Multiple smells (specify)

Q78c. What color (was this / were these) pesticide(s)?

- 01 COLORLESS / CLEAR
- 02 DARK BROWN
- 03 LIGHT BROWN
- 04 GREY
- 05 ORANGE
- 06 RED
- 07 WHITE
- 08 OPAQUE / CLOUDY / MILKY
- 09 YELLOW
- 10 OTHER → DESCRIBE: \_\_\_\_\_
- 11 MORE THAN ONE COLOR (USE FOR GROUPS)

Q79c. Did you apply this pesticide on your uniform, your body, or both?

- 1 UNIFORM
- 2 BODY
- 3 BOTH UNIFORM AND BODY

Q80c. Where did you get (this / these) pesticide(s)? Was it . . . [READ LIST]?

- 01 US military issued,
- 02 from the PX,
- 03 from the US (something you brought with you from the US, from a friend or relative in the US, etc.)
- 04 from fellow US soldiers,
- 05 from international soldiers or a local source (Allied / International Soldiers, local contractors, or other non-US source: Saudis, Turks, Bahraini, Egyptians, Syrians),
- 06 or from some other source? → DESCRIBE: \_\_\_\_\_
- 07 DON'T KNOW

Q81c. During [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A], how often did you use this pesticide?

[ ] EVERYDAY

OR

\_\_\_\_\_ TIMES

PER: DAY  
WEEK  
MONTH

SOME OTHER PERIOD: \_\_\_\_\_

Q81Ac. On the days that you used this pesticide in [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A], did you use it . . . [READ LIST]

- 1 Once a day,
- 2 Twice a day,
- 3 Three times a day, or
- 4 Four or more times a day?

IF Q81c = EVERYDAY, GO TO Q83c.

Q82c. Did you stop using this pesticide during [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A] because [READ LIST]? (Mark "1" Yes or "0" No for Each Item)

	<u>Yes</u>	<u>No</u>
a. Pests stopped being a problem, because	1	0
b. You ran out of pesticides, or	1	0
c. For any other reason?	1	0

Describe: \_\_\_\_\_



Q83c. Did you experience any side effects from this pesticide?

1 YES → ASK Q84c

0 NO → GO TO CATI CHECK AFTER Q84c

Q84c. During this period, did you stop using this pesticide or reduce the amount you used because of side effects?

1 YES

0 NO

ASK Q92 ONLY IF R USED PESTICIDES ON HIS BODY AND / OR UNIFORM (Q24 A, B, C, D, E, F, OR G = YES).

Q92. How often did you shower during [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A]? By shower we mean any time that you were able to clean yourself using both water and soap. For example, a sponge bath would count as long as both soap and water were used in the process.

☐ EVERYDAY

OR

\_\_\_\_\_ # TIMES

PER: DAY

WEEK

MONTH

SOME OTHER PERIOD: \_\_\_\_\_

ASK Q93 ONLY IF ONE OR MORE PESTICIDES WAS APPLIED TO UNIFORM [E.G., Q29 AND EQUIVALENT QUESTIONS = CODE 1 (PESTICIDE USED ON UNIFORM)]

Q93. How often during [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A] were you able to change into a fresh/clean uniform? By "fresh, clean uniform" we mean one that has either been laundered or washed with both soap and water.

☐ EVERYDAY

OR

\_\_\_\_\_ # TIMES

PER: DAY

WEEK

MONTH

SOME OTHER PERIOD: \_\_\_\_\_

FIELD USE OF PESTICIDES BY RESPONDENT AND OTHERS

Q94. The next questions are about other pesticides you or others used around the areas where you slept, ate, and worked during [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A]. This includes yourself, other US troops, international troops, local contractors, or anyone else who used pesticides at that time.

During [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A], did you or anyone else use [READ PESTICIDE] to kill or control pests around the areas where you slept, ate, and worked?

(Mark One on Each Line)

	<u>YES</u>	<u>NO</u>	<u>DK</u>
a. Animal traps such as roach motels, Combat, traps for mice and rats, or fly strips	1	0	D
b. Powders	1	0	D
c. Pellets / crystals / granules	1	0	D
d. Aerosol sprays or pump sprays (not including hand-held sprayers, like an exterminator might use)	1	0	D
e. Sprays from trucks or planes, or hand-held sprayers ( <u>not</u> over-the-counter aerosol products)	1	0	D
f. No-Pest Strips ( <u>not</u> fly strips)	1	0	D
g. Liquids	1	0	D
h. Other types of pesticides – List:	1	0	D

CATI CHECK Q94A-H:

R OR OTHERS DID NOT USE ANY PESTICIDES (Q94A-H = NO), GO TO MODULE 4.

R OR OTHERS USED ANIMAL TRAPS (Q94A = YES), ASK Q95 intro.

R OR OTHERS DID NOT USE ANIMAL TRAPS (Q94A = NO) BUT USED POWDERS (Q94B = YES), GO TO Q103.

R OR OTHERS DID NOT USE ANIMAL TRAPS (Q94A = NO) BUT USED PELLETS, CRYSTALS, OR GRANULES (Q94C = YES), GO TO Q129.

R OR OTHERS DID NOT USE ANIMAL TRAPS (Q94A = NO) BUT USED AEROSOL SPRAYS (Q94D = YES), GO TO Q148.

R OR OTHERS DID NOT USE ANIMAL TRAPS (Q94A = NO) BUT USED SPRAYS FROM TRUCKS OR PLANES, OR HAND-HELD SPRAYERS (Q94E = YES), GO TO Q167.

R OR OTHERS DID NOT USE ANIMAL TRAPS (Q94A = NO) BUT USED NO-PEST STRIPS (Q94F = YES), GO TO Q185.

R OR OTHERS DID NOT USE ANIMAL TRAPS (Q94A = NO) BUT USED LIQUIDS (Q94G = YES), GO TO Q190.

R OR OTHERS DID NOT USE ANIMAL TRAPS (Q94A = NO) BUT USED OTHER PESTICIDES (Q94H = YES), GO TO Q210.

FIELD USE OF ANIMAL TRAPS

Q95intro. You mentioned that you or someone else used animal traps in [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A] to kill or control pests. Did these traps use a pesticide in them to attract or kill pests?

YES → GO TO Q95

NO → GO TO NEXT CATI CHECK BEFORE Q103

Q95. Did you personally set the trap(s) or did someone else do this?

- 1 SELF (GO TO Q95t)
- 2 SOMEONE ELSE (GO TO Q100)
- 3 BOTH → CONTINUE WITH Q95u

Q95u. Were you and the others using all of the same type of traps, or different types?

(Mark One)

- 1 DIFFERENT → First, I'd like to ask you about the traps you personally used. Then we can talk about what others used. GO TO Q95t.
- 2 SAME → ASK Q95o, THEN GO TO Q95t
- 3 SAME & DIFFERENT → First, I'd like to talk about the traps you used, along with any usage by others of (this / these) same traps. Then I'll ask about any traps others used that you did not. GO TO Q95t

Q95o. Who were the others that were using these traps besides you? Was it . . . [READ LIST]?

(Mark "1" Yes or "0" No for Each Item)

- 01 U.S. military troops,
- 02 Non-U.S. troops (Allied / International Soldiers),
- 03 A local non-military source (such as local contractors), or
- 04 Someone else? – Who? (SPECIFY)

Q95t. What type of animal trap was this?

- 1 MOUSE OR RAT TRAP
- 2 OTHER: Describe \_\_\_\_\_

Q95\_1 How many different traps did you (and the others) use at that time, including only pesticides we haven't already discussed?

- 1 1
- 2 2
- 3 3
- 4 4 OR MORE

CATI CHECK: IF Q95\_1 = 1, GO TO Q95r

Q95i. Can you remember your usage of these traps individually, or did you use some of these so interchangeably during [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A] that in thinking back you can't tell them apart?

- 1 REMEMBER INDIVIDUALLY
- 0 USED ALL INTERCHANGEABLY
- 2 SOME INDIVIDUALLY / SOME INTERCHANGEABLY

Q95r. Do you remember the name of the trap(s) that you (and the others) used?

- 1 YES
- 2 NO

Q95n. What is the name of each trap you (and the others) used?

[ SEE PESTICIDE LIST – page 22 ]

Q96. Where did you and the others get the traps? Was it . . . [READ LIST]?

(Enter "1" for All That Apply)

- 01 US military issued,
- 02 from the PX,
- 03 from the US (something you brought with you from the US, from a friend or relative in the US, etc.)
- 04 from fellow US soldiers,
- 05 from international soldiers or a local source (Allied / International Soldiers, local contractors, or other non-US source: Saudis, Turks, Bahraini, Egyptians, Syrians),
- 06 or from some other source? → DESCRIBE: \_\_\_\_\_
- 07 DON'T KNOW

CATI CHECK: IF Q18 = 3 OR 5 ONLY, SKIP OVER OPTIONS B & C BELOW.

Q97. Where did you (and the others) put the traps? Did you put it [READ LIST]?

YES NO

- 1 0 a. In or near your bednetting, blankets, or sleeping bags
- 1 0 b. In or around your sleeping quarters

- 1 0 c. On the floor in your mess hall / designated eating area
- 1 0 d. On the table in your mess hall / designated eating area
- 1 0 e. In other areas where you ate (not counting mess halls /  
designated eating areas)
- 1 0 f. In or near your work areas
- 1 0 g. In or near your military vehicle
- 1 0 h. In or near your latrine
- 1 0 i. In other areas – Where?

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_

Q98. During [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A],  
how often did you use this trap?

[ ] EVERYDAY

OR

\_\_\_\_\_ # OF TIMES

PER:

DAY

WEEK

MONTH

SOME OTHER PERIOD: \_\_\_\_\_

ASK Q98A ONLY IF Q95 = 3 (BOTH). SKIP Q98A IF Q95 = 1.

Q98A. During this time, how often did you see others set out this trap?

\_\_\_\_\_ # TIMES

PER:

DAY

WEEK

MONTH

SOME OTHER PERIOD: \_\_\_\_\_

USED THE ENTIRE TIME → GO TO CATI CHECK BEFORE Q100

IF Q98 = EVERYDAY, GO TO Q99

Q99. Did you stop using traps at any time during [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A] because [READ LIST]? (Mark "1" Yes or "0" No for Each Item) READ LIST AS A WHOLE

	<u>Yes</u>	<u>No</u>
a. pests stopped being a problem, because	1	0
b. you ran out of traps,	1	0
c. or for any other reason? (RECORD BELOW)	1	0

CATI CHECK: IF Q95 = 2 (SOMEONE ELSE USED TRAPS) OR IF Q95 = 3 (BOTH) & = Q95u=1 or 3 (DIFFERENT), GO TO Q100. OTHERS GO TO CATI CHECK BEFORE Q103.

ANIMAL TRAPS USED BY OTHERS

Q100. You mentioned that someone else used traps at that time. Who was that . . . [READ LIST]:  
(Mark "1" Yes or "0" No for Each Item)

- 01 US military troops,
- 02 Allied / International soldiers,
- 03 A local source (Saudis, Turks, Bahraini, etc.), or
- 04 Someone else? – Who?: \_\_\_\_\_

Q100type. What type of animal trap was this?

- 1 MOUSE OR RAT TRAP
- 2 OTHER: Describe \_\_\_\_\_

Q100num. To your knowledge, how many different types of traps did they use during that time?

- 1 1
- 2 2
- 3 3
- 4 4 OR MORE

Q100k. Do you know the name(s) of the trap(s) that others used?

- 1 YES
- 0 NO

Q100name. What is the name of each trap they used?

[ SEE PESTICIDE LIST – page 22 ]

Q101. Where did they put the traps? Did they put them [READ LIST]?

(MARK YES OR NO ON EACH LINE)

[ ] IN ALL OF THE SAME LOCATIONS AS R → GO TO Q102

CATI CHECK: IF Q18 = 3 OR 4 ONLY, SKIP OVER OPTIONS C & D BELOW.

YES NO

- |   |   |  |
|---|---|--|
| 1 | 0 | a. In or near your bednetting, blankets, or sleeping bags                                  |
| 1 | 0 | b. In or around your sleeping quarters   |
| 1 | 0 | c. On the floor in your mess hall / designated eating area                                 |
| 1 | 0 | d. On the table in your mess hall / designated eating area                                 |
| 1 | 0 | e. In <u>other</u> areas where you ate (not counting mess halls / designated eating areas) |
| 1 | 0 | f. In or near your work areas  |
| 1 | 0 | g. In or near your military vehicle  |
| 1 | 0 | h. In or near your latrine   |
| 1 | 0 | i. In other areas – Where?   |

Q102. During [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A], how often did you see these traps?

[ ] EVERYDAY

OR

\_\_\_\_\_ # OF TIMES

PER: DAY

WEEK

MONTH

SOME OTHER PERIOD: \_\_\_\_\_

CATI CHECK Q94A-H:

R OR OTHERS USED POWDERS (Q94B = YES), ASK Q103.

R OR OTHERS DID NOT USE POWDERS (Q94B = NO) BUT USED PELLETS / CRYSTALS / GRANULES (Q94C = YES), GO TO Q129.

R OR OTHERS DID NOT USE POWDERS (Q94B = NO) BUT USED AEROSOL SPRAYS (Q94D = YES), GO TO Q148.

R OR OTHERS DID NOT USE POWDERS (Q94B = NO) BUT USED SPRAYS FROM TRUCKS OR PLANES, OR HAND-HELD SPRAYERS (Q94E = YES), GO TO Q167.

R OR OTHERS DID NOT USE POWDERS (Q94B = NO) BUT USED NO-PEST STRIPS (Q94F = YES),  
GO TO Q185.

R OR OTHERS DID NOT USE POWDERS (Q94B = NO) BUT USED LIQUIDS  
(Q94G = YES), GO TO Q190.

R OR OTHERS DID NOT USE POWDERS (Q94B = NO) BUT USED OTHER PESTICIDES (Q94H =  
YES), GO TO Q210.

FIELD USE OF POWDERS

Q103. You mentioned that you or someone else used powders around the places where you slept, ate, sor  
worked during [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN  
Q11A] to kill or control pests.

Did you personally use them or did someone else?

- 1 SELF → GO TO Q104
- 2 SOMEONE ELSE → GO TO Q123
- 3 BOTH → CONTINUE WITH Q103u.

Q103u. Were you and the others using all of the same type of powders, or different types?

- 1 DIFFERENT → First, I'd like to ask you about the powders you personally used.  
Then we can talk about what others did. GO TO Q104.
- 2 SAME → ASK Q103o, THEN GO TO Q104
- 3 SAME & DIFFERENT → First, I'd like to talk about the powders you used along with any usage by  
others or (this / these) same powders. Then I'll ask about any  
powders others used that you did not.  
GO TO Q104

Q103o. Who were the others that were using powders besides you? Were they . . . [READ LIST]?  
(Mark "1" Yes or "0" No for Each Item)

- 01 U.S. military troops,
- 02 Non-U.S. troops (Allied / International Soldiers),
- 03 A local non-military source (such as local contractors), or
- 04 Someone else? – Who? (SPECIFY)

Q104. How many different powders did you (and the others) use at that time?

- 1 1
- 2 2
- 3 3



CATI CHECK: IF Q104 = 1, GO TO Q103r

Q103i. Can you remember your usage of these powders individually, or did you use some of these powders so interchangeably during [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A] that in thinking back you can't tell them apart?

- 1 REMEMBER INDIVIDUALLY
- 0 USED ALL INTERCHANGEABLY
- 2 SOME INDIVIDUALLY / SOME INTERCHANGEABLY

Q103r. Do you remember the name of the powder(s) that you (and the others) used?

- 1 YES → ASK Q103n
- 0 NO

Q103n. What is the name of each powder you (and the others) used?

[ SEE PESTICIDE LIST – page 22 ]

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Q103a. [IF Q103i = 1 AND Q104 ≥ 2 ASK]  
I'd like to ask you about each of these powders separately.

[IF Q103i = 0 AND Q104 ≥ 2 ASK]  
I'd like to ask you about your use of these powders.

[IF Q103i = 2 AND Q104 ≥ 2 ASK]  
I'd like to ask you about the one you used separately. Then I'll ask about the other powder(s) you used.

[IF Q104 = 1 ASK]  
I'd like to ask you about this powder.

Q103b. [IF Q103n @1 = d GO TO Q105]

[IF Q103n @1 ≥ 1 AND Q103n @1 < 98 GO TO Q103p]

#### RESPONDENT USE OF POWDERS (Q105 – Q114B)

105. Did (this / these) powder(s) have a particular smell?

- 1 YES → ASK Q106
- 0 NO → GO TO Q107

106. Did it smell like [READ LIST]?

- 01 Cooking oil,
- 02 Rotten eggs or sulfur,
- 03 Gasoline,
- 04 Kerosene,
- 05 Chemicals,
- 06 Insecticides,
- 07 Something sweet,
- 08 Something musty, or
- 09 Something else? → How would you describe this odor? \_\_\_\_\_
- 10 Multiple smells (specify)

107. What color (was this / were these) powder(s)?

- 01 COLORLESS / CLEAR
- 02 DARK BROWN
- 03 LIGHT BROWN
- 04 GREY
- 05 ORANGE
- 06 RED
- 07 WHITE
- 08 OPAQUE / CLOUDY / MILKY
- 09 YELLOW
- 10 OTHER → DESCRIBE: \_\_\_\_\_
- 11 MORE THAN ONE COLOR (USE FOR GROUPS)

108. Where did you get it from? Was it . . . [READ LIST]?

*(Enter 1 for All That Apply)*

- 01 US military issued,
- 02 from the PX,
- 03 from the US (something you brought with you from the US, from a friend or relative in the US, etc.)
- 04 from fellow US soldiers,

- 05 from international soldiers or a local source (Allied / International Soldiers,  
local contractors, or other non-US source: Saudis, Turks, Bahraini, Egyptians, Syrians),  
06 or from some other source? → DESCRIBE: \_\_\_\_\_  
07 DON'T KNOW

109. Where did you (and the others) put the powder? Did you put it . . . [READ LIST]?

(Mark YES or NO for Each Item)

[ ] IN ALL OF THE SAME LOCATIONS AS R → GO TO Q110

CATI CHECK: IF Q18 = 3 OR 4 ONLY, SKIP OVER OPTIONS C & D BELOW.

YES NO

- |   |   |   |
|---|---|---|
| 1 | 0 | a. In or near your bednetting, blankets, or sleeping bags                                     |
| 1 | 0 | b. In or around your sleeping quarters  |
| 1 | 0 | c. On the floor in your mess hall / designated eating area                                    |
| 1 | 0 | d. On the table in your mess hall / designated eating area                                    |
| 1 | 0 | e. In <u>other</u> areas where you ate (not counting mess halls /<br>designated eating areas) |
| 1 | 0 | f. In or near your work areas   |
| 1 | 0 | g. In or near your military vehicle   |
| 1 | 0 | h. In or near your latrine  |
| 1 | 0 | i. In other areas – Where?  |

110. During [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A],  
how often did you personally use this powder?

[ ] EVERYDAY

OR

\_\_\_\_\_ # OF TIMES

PER: DAY

WEEK

MONTH

SOME OTHER PERIOD: \_\_\_\_\_

CATI CHECK: IF Q103 = 3 AND Q103u = 1, GO TO Q111

110A. During [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A], how often did you see others use this powder?

[ ] EVERYDAY

OR

\_\_\_\_\_ # TIMES

PER: DAY

WEEK

MONTH

OTHER PERIOD: \_\_\_\_\_

Q111. During [RANDOM MONTH] did you (or others) dispose of the old powder?

YES, R ONLY → GO TO Q111A

YES, R & OTHERS → GO TO Q111A

YES, OTHERS ONLY → GO TO Q111A

NO → GO TO 112

Q111A. How did you (and/or others) dispose of (it / them)?

(Mark "1" Yes or "0" No for Each Item)

1 DUMPED IN OUTSIDE TRASH CONTAINER

2 DUMPED IN INSIDE TRASH CONTAINER

3 DIDN'T HAVE TO DUMP IT BECAUSE WIND WOULD BLOW IT AWAY

4 OTHER – DESCRIBE: \_\_\_\_\_

IF Q110 = EVERYDAY, SKIP TO Q113.

Q112. Did you personally stop using (this / these) powder(s) during [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A] because [READ LIST]?

(Mark "1" Yes or "0" No for Each Item)

	<u>Yes</u>	<u>No</u>
a. pests stopped being a problem; because	1	0
b. you ran out of pesticides; or	1	0
c. for any other reason?	1	0

Describe: \_\_\_\_\_

Q113. Did you experience any side effects from (this / these) powder(s)?

- 1 YES → ASK Q113A
- 0 NO → GO TO Q114

*NOTE FOR TRAINING: PHRASE "STOP USING THIS POWDER" SHOULD BE BYPASSED IF Q110 = "EVERYDAY" OR Q112 a-c = NO.*

113A. During this period, did you stop using (this / these) powder(s) or reduce the amount you used because of side effects?

- 1 YES
- 0 NO

Q114. Were you ever issued protective equipment during [RANDOM DATE] to use when you handled (this / these) powder(s)?

- 1 YES → GO TO Q114A
- 0 NO → GO TO NEXT CATI CHECK

Q114A. Did you use this protective equipment during [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A] when you handled (this / these) powder(s)?

- 1 YES → ASK Q114B
- 0 NO → GO TO NEXT CATI CHECK

Q114B. How often did you use this protective equipment during that time? [READ LIST]

- 1 Never,
- 2 Sometimes,
- 3 Usually, or
- 4 Always?

CATI: REPEAT Q105 – 114B FOR THE 2<sup>ND</sup> AND 3<sup>RD</sup> POWDER USED BY THE RESPONDENT.  
INTERVIEWER SAYS: Now I'd like to ask the same questions about the 2<sup>ND</sup> POWDER YOU USED.

OTHERS, GO TO CATI CHECK BEFORE Q123

Q105b. Did (this / these) powder(s) have a particular smell?

- 1 YES → ASK Q106b
- 0 NO → GO TO Q107b

Q106b. Did it smell like [READ LIST]?

- 01 Cooking oil,
- 02 Rotten eggs or sulfur,
- 03 Gasoline,
- 04 Kerosene,
- 05 Chemicals,
- 06 Insecticides,
- 07 Something sweet,
- 08 Something musty, or
- 09 Something else? → How would you describe this odor? \_\_\_\_\_
- 10 Multiple smells (specify)

Q107b. What color was (this / these) powder(s)?

- 01 COLORLESS / CLEAR
- 02 DARK BROWN
- 03 LIGHT BROWN
- 04 GREY
- 05 ORANGE
- 06 RED
- 07 WHITE
- 08 OPAQUE / CLOUDY / MILKY
- 09 YELLOW
- 10 OTHER → DESCRIBE: \_\_\_\_\_
- 11 MORE THAN ONE COLOR (USE FOR GROUPS)

Q108b. Where did you (and others) get this powder from? Was it . . . [READ LIST]?

- 01 US military issued,
- 02 from the PX,
- 03 from the US (something you brought with you from the US, from a friend or relative in the US, etc.)
- 04 from fellow US soldiers,
- 05 from international soldiers or a local source (Allied / International Soldiers, local contractors, or other non-US source: Saudis, Turks, Bahraini, Egyptians, Syrians),
- 06 or from some other source? → DESCRIBE: \_\_\_\_\_
- 07 DON'T KNOW

Q109b. Where did you (and the others) put the powder? Did you put it . . . [READ LIST]?

(Mark YES or NO for Each Item)

[ ] IN ALL OF THE SAME LOCATIONS AS R → GO TO Q110b

CATI CHECK: IF Q18 = 3 OR 4 ONLY, SKIP OVER OPTIONS C & D BELOW.

YES NO

- |   |   |  |
|---|---|--|
| 1 | 0 | a. In or near your bednetting, blankets, or sleeping bags                                  |
| 1 | 0 | b. In or around your sleeping quarters   |
| 1 | 0 | c. On the floor in your mess hall / designated eating area                                 |
| 1 | 0 | d. On the table in your mess hall / designated eating area                                 |
| 1 | 0 | e. In <u>other</u> areas where you ate (not counting mess halls / designated eating areas) |
| 1 | 0 | f. In or near your work areas  |
| 1 | 0 | g. In or near your military vehicle  |
| 1 | 0 | h. In or near your latrine   |
| 1 | 0 | i. In other areas – Where?   |

Q110b. During [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A], how often did you personally use this powder?

[ ] EVERYDAY

OR

\_\_\_\_\_ TIMES

PER:

DAY

WEEK

MONTH

SOME OTHER PERIOD: \_\_\_\_\_

CATI CHECK: IF Q103 = 1, GO TO Q111b

Q110Ab. During [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A], how often did you see others use this powder?

[ ] EVERYDAY

OR

\_\_\_\_\_ TIMES

PER:

DAY

WEEK

MONTH

SOME OTHER PERIOD: \_\_\_\_\_

Q111b. During [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A], did you (and others) dispose of the old powders?

YES → GO TO Q111Ab

NO → GO TO Q112b

Q111Ab. How did you (and others) dispose of (it / them)?

(Mark "1" Yes or "0" No for Each Item)

1 DUMPED IN OUTSIDE TRASH CONTAINER

2 DUMPED IN INSIDE TRASH CONTAINER

3 DIDN'T HAVE TO DUMP IT BECAUSE WIND WOULD BLOW IT AWAY

4 OTHER – DESCRIBE: \_\_\_\_\_

CATI CHECK: IF Q110b = EVERYDAY, SKIP Q112b.

Q112b. Did you personally stop using this powder during [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A] because [READ LIST]?

(Mark "1" Yes or "0" No for Each Item) READ LIST AS A WHOLE

	<u>Yes</u>	<u>No</u>
a. Pests stopped being a problem, because	1	0
b. You ran out of pesticides, or	1	0
c. For any other reason?	1	0
Describe: _____		

Q113b. Did you experience any side effects from this powder during [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A]?

1 YES → ASK Q113Ab

0 NO → GO TO Q114b

Q113Ab. During this period, did you stop using (this / these) powder(s) or reduce the amount you used because of side effects?

1 YES

0 NO

Q114b. Were you ever issued protective equipment during [RANDOM MONTH] when you handled (this / these) powder(s)?

1 YES → GO TO Q114Ab

0 NO → GO TO NEXT CATI CHECK



Q114Ab. Did you use this protective equipment during [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A] when you handled (this / these) powder(s)?

1 YES → ASK Q114Bb

0 NO → GO TO NEXT CATI CHECK

Q114Bb. How often did you use this protective equipment during that time? [READ LIST]

1 Never,

2 Sometimes,

3 Usually, or

4 Always?

CATI CHECK: Now let's talk about the 3<sup>rd</sup> powder you used at that time.  
OTHERS, GO TO NEXT CATI CHECK.

Q105c. Did this powder have a particular smell?

1 YES → ASK Q106c

0 NO → GO TO Q107c

Q106c. Did it smell like [READ LIST]?

01 Cooking oil,

02 Rotten eggs or sulfur,

03 Gasoline,

04 Kerosene,

05 Chemicals,

06 Insecticides,

07 Something sweet,

08 Something musty, or

09 Something else? → How would you describe this odor? \_\_\_\_\_

10 Multiple smells (specify)

Q107c. What color (was this / were these) powder(s)?

- 01 COLORLESS / CLEAR
- 02 DARK BROWN
- 03 LIGHT BROWN
- 04 GREY
- 05 ORANGE
- 06 RED
- 07 WHITE
- 08 OPAQUE / CLOUDY / MILKY
- 09 YELLOW
- 10 OTHER → DESCRIBE: \_\_\_\_\_
- 11 MORE THAN ONE COLOR (USE FOR GROUPS)

Q108c. Where did you (and others) get this powder? Were they . . . [READ LIST]?

- 01 US military issued,
- 02 from the PX,
- 03 from the US (something you brought with you from the US, from a friend or relative in the US, etc.)
- 04 from fellow US soldiers,
- 05 from international soldiers or a local source (Allied / International Soldiers, local contractors, or other non-US source: Saudis, Turks, Bahraini, Egyptians, Syrians),
- 06 or from some other source? → DESCRIBE: \_\_\_\_\_
- 07 DON'T KNOW

Q109c. Where did you (and the others) put the powder? Did you put it . . . [READ LIST]?

(Mark YES or NO for Each Item)

[ ] IN ALL OF THE SAME LOCATIONS AS R → GO TO Q110c

CATI CHECK: IF Q18 = 3 OR 4 ONLY, SKIP OVER OPTIONS C & D BELOW.

YES NO

- 1 0 a. In or near your bednetting, blankets, or sleeping bags
- 1 0 b. In or around your sleeping quarters
- 1 0 c. On the floor in your mess hall / designated eating area
- 1 0 d. On the table in your mess hall / designated eating area
- 1 0 e. In other areas where you ate (not counting mess halls / designated eating areas)

- 1     0     f. In or near your work areas
- 1     0     g. In or near your military vehicle
- 1     0     h. In or near your latrine
- 1     0     i. In other areas – Where?

Q110c. During [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A], how often did you personally use this powder?

[ ] EVERYDAY

OR

\_\_\_\_\_ TIMES

PER: DAY

WEEK

MONTH

SOME OTHER PERIOD: \_\_\_\_\_

ASK Q110Ac ONLY IF Q103 = 3 AND Q103u = 2.

Q110Ac. During [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A], how often did you see others use this powder?

[ ] EVERYDAY

OR

\_\_\_\_\_ TIMES

PER: DAY

WEEK

MONTH

SOME OTHER PERIOD: \_\_\_\_\_

Q111c. During [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A], did you (or others) dispose of the old powders?

YES → GO TO Q111Ac

NO → GO TO Q112c

Q111Ac. How did you (and others) dispose of (it / them)?

(Mark "1" Yes or "0" No for Each Item)

- 1 DUMPED IN OUTSIDE TRASH CONTAINER
- 2 DUMPED IN INSIDE TRASH CONTAINER
- 3 DIDN'T HAVE TO DUMP IT BECAUSE WIND WOULD BLOW IT AWAY
- 4 OTHER - DESCRIBE: \_\_\_\_\_

Q112c. Did you stop using this powder during [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A] because [READ LIST]? (Mark "1" Yes or "0" No for Each Item)

	<u>Yes</u>	<u>No</u>
a. Pests stopped being a problem, because	1	0
b. You ran out of pesticides, or	1	0
c. For any other reason?	1	0

Describe: \_\_\_\_\_

Q113c. Did you experience any side effects from (this / these) powder(s) during [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A]?

- 1 YES → ASK Q113Ac
- 0 NO → GO TO Q114c

Q113Ac. During this period, did you stop using this powder or reduce the amount you used because of side effects?

- 1 YES
- 0 NO

Q114c. Were you ever issued protective equipment during [RANDOM MONTH] when you handled (this / these) powder(s)?

- 1 YES → GO TO Q114Ac
- 0 NO → GO TO NEXT CATI CHECK

Q114Ac. Did you use this protective equipment during [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A] when you handled (this / these) powder(s)?

- 1 YES → ASK Q114Bc
- 0 NO → GO TO NEXT CATI CHECK

Q114Bc. How often did you use this protective equipment during that time? [READ LIST]

- 1 Never,
- 2 Sometimes,
- 3 Usually, or
- 4 Always?

CATI CHECK: CONTINUE WITH Q123 ONLY IF SOMEONE ELSE SET OUT THE POWDERS (Q103 = CODE 2 OR Q103 = 3 (BOTH & DIFFERENT))

POWDERS USED BY OTHERS

Q123. You mentioned that someone else used powders at that time. Do you know who did this?

Were they . . . [READ LIST]?

(Mark "1" Yes or "0" No for Each Item)

- 01 U.S. military troops,
- 02 Non-U.S. military troops (Allied / International soldiers),
- 03 A local non-military source (such as local contractors), or
- 04 Someone else? – Who?: \_\_\_\_\_

Q124. To your knowledge, how many different types of powders did they use during that time?

- 1 1
- 2 2
- 3 3
- 4 4 OR MORE

CATI CHECK: IF Q124 = 1, GO TO Q123r

Q123i. Can you remember others' usage of these powders individually, or did they use some of these powders so interchangeably during [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A] that in thinking back you can't tell them apart?

- 1 REMEMBER INDIVIDUALLY
- 0 USED ALL INTERCHANGEABLY
- 2 SOME INDIVIDUALLY / SOME INTERCHANGEABLY

123r. Do you know the name of the powder(s) that were used by others?

- 1 YES → ASK Q123n
- 0 NO → GO TO Q123u

123n. What is the name of each powder they used?

[ SEE PESTICIDE LIST – page 22 ]

---

Q123intro. [IF Q123i = 1 AND Q124 ≥ 0 ASK]  
I'd like to ask you about each of these powders separately.

[IF Q123i = 0 AND Q124 ≥ 2 ASK]  
I'd like to ask you about their use of these powders.

[IF Q124 = 1 ASK]  
I'd like to ask you about this powder.

Q123b. [IF Q123n @1 = 98 or d GO TO Q125]

[IF Q123n @1 ≥ 1 AND Q123n @1 < 98 GO TO Q123p]

125. Did this powder have a particular smell?

- 1 YES → ASK Q125A
- 0 NO → GO TO Q126

125A. Did this powder smell like [READ LIST]?

- 01 Cooking oil,
  - 02 Rotten eggs or sulfur,
  - 03 Gasoline,
  - 04 Kerosene,
  - 05 Chemicals,
  - 06 Insecticides,
  - 07 Something sweet,
  - 08 Something musty, or
  - 09 Something else? → How would you describe this odor?
- 

126. What color (was this / were these) powder(s)?

- 01 COLORLESS / CLEAR
- 02 DARK BROWN
- 03 LIGHT BROWN
- 04 GREY
- 05 ORANGE
- 06 RED
- 07 WHITE
- 08 OPAQUE / CLOUDY / MILKY
- 09 YELLOW
- 10 OTHER → DESCRIBE: \_\_\_\_\_
- 11 MORE THAN ONE COLOR (USE FOR GROUPS)

127. Where did they put the powder(s)? Did they put it [READ LIST]?

[ ] IN ALL OF THE SAME LOCATIONS AS R → GO TO Q128

CATI CHECK: IF Q18 = 3 OR 4 ONLY, SKIP OVER OPTIONS C & D BELOW.

YES NO

- |   |   |  |
|---|---|--|
| 1 | 0 | a. In or near your bednetting, blankets, or sleeping bags                                |
| 1 | 0 | b. In or around your sleeping quarters   |
| 1 | 0 | c. On the floor in your mess hall / designated eating areas                              |
| 1 | 0 | d. On the table in your mess hall / designated eating areas                              |
| 1 | 0 | e. In <u>other</u> areas where you ate (not counting mess halls/designated eating areas) |

- 1 0 f. In or near your work areas  
1 0 g. In or near your military vehicle  
1 0 h. In or near your latrine  
1 0 i. In other areas – Where?

128. During [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A],  
how often did you see this powder?

[ ] EVERYDAY

OR

\_\_\_\_\_ # OF TIMES PER: DAY  
WEEK  
MONTH  
SOME OTHER PERIOD: \_\_\_\_\_

128sea. Did you experience any side effects from (this / these) powder(s)?

- 1 YES  
0 NO

CATI CHECK: REPEAT Q125 – Q128 FOR EACH POWDER OTHERS USED.

INTERVIEWERS, SAY: Now let's talk about the 2<sup>ND</sup> type of powder used by others at that time.

OTHERS, GO TO CATI CHECK BEFORE Q129.

125b. Did this powder have a particular smell?

- 1 YES → ASK Q125Ab  
0 NO → GO TO Q126b

125Ab. Did it smell like [READ LIST]?

- 01 \_\_\_ Cooking oil,  
02 \_\_\_ Rotten eggs or sulfur,  
03 \_\_\_ Gasoline,  
04 \_\_\_ Kerosene,  
05 \_\_\_ Chemicals,  
06 \_\_\_ Insecticides,  
07 \_\_\_ Something sweet,  
08 \_\_\_ Something musty, or  
09 \_\_\_ Something else? → How would you describe this odor?  
\_\_\_\_\_



126b. What color was this powder?

- 01 COLORLESS / CLEAR
- 02 DARK BROWN
- 03 LIGHT BROWN
- 04 GREY
- 05 ORANGE
- 06 RED
- 07 WHITE
- 08 OPAQUE / CLOUDY / MILKY
- 09 YELLOW
- 10 OTHER → DESCRIBE: \_\_\_\_\_
- 11 MORE THAN ONE COLOR (USE FOR GROUPS)

127b. Where did they put the powder(s)? Did they put it [READ LIST]?

[ ] IN ALL OF THE SAME LOCATIONS AS R → GO TO Q128b

CATI CHECK: IF Q18 = 3 OR 4 ONLY, SKIP OVER OPTIONS C & D BELOW.

YES NO

- |   |   |  |
|---|---|--|
| 1 | 0 | a. In or near your bednetting, blankets, or sleeping bags                                |
| 1 | 0 | b. In or around your sleeping quarters   |
| 1 | 0 | c. On the floor in your mess hall / designated eating areas                              |
| 1 | 0 | d. On the table in your mess hall / designated eating areas                              |
| 1 | 0 | e. In <u>other</u> areas where you ate (not counting mess halls/designated eating areas) |
| 1 | 0 | f. In or near your work areas  |
| 1 | 0 | g. In or near your military vehicle  |
| 1 | 0 | h. In or near your latrine   |
| 1 | 0 | i. In other areas – Where?   |

128b. During [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A], how often did you see this powder?

[ ] EVERYDAY

OR

\_\_\_\_\_ # OF TIMES

PER: DAY

WEEK

MONTH

SOME OTHER PERIOD: \_\_\_\_\_

128seb. Did you experience any side effects from (this / these) powder(s)?

1 YES

0 NO

INTERVIEWERS, SAY: Now let's talk about the 3<sup>RD</sup> type of powder used by others at that time.

125c. Did this powder have a particular smell?

1 YES → ASK Q125Ac

0 NO → GO TO Q126c

125Ac. Did it smell like [READ LIST]?

01 Cooking oil,

02 Rotten eggs or sulfur,

03 Gasoline,

04 Kerosene,

05 Chemicals,

06 Insecticides,

07 Something sweet,

08 Something musty, or

09 Something else? → How would you describe this odor?

---

126c. What color (was this / were these) powder(s)?

01 COLORLESS / CLEAR

02 DARK BROWN

03 LIGHT BROWN

04 GREY

05 ORANGE

06 RED

07 WHITE

08 OPAQUE / CLOUDY / MILKY

09 YELLOW

10 OTHER → DESCRIBE: \_\_\_\_\_

11 MORE THAN ONE COLOR (USE FOR GROUPS)

127c. Where did they put the powder(s)? Did they put it [READ LIST]?

[ ] IN ALL OF THE SAME LOCATIONS AS R → GO TO Q128c

(Mark YES or NO for Each Item)

CATI CHECK: IF Q18 = 3 OR 4 ONLY, SKIP OVER OPTIONS C & D BELOW.

YES NO

- |   |   |  |
|---|---|--|
| 1 | 0 | a. In or near your bednetting, blankets, or sleeping bags                                |
| 1 | 0 | b. In or around your sleeping quarters   |
| 1 | 0 | c. On the floor in your mess hall / designated eating areas                              |
| 1 | 0 | d. On the table in your mess hall / designated eating areas                              |
| 1 | 0 | e. In <u>other</u> areas where you ate (not counting mess halls/designated eating areas) |
| 1 | 0 | f. In or near your work areas  |
| 1 | 0 | g. In or near your military vehicle  |
| 1 | 0 | h. In or near your latrine   |
| 1 | 0 | i. In other areas – Where?   |

128c. During [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A], how often did you personally see (this/these) powder(s)?

[ ] EVERYDAY

OR

_____ # OF TIMES	PER:	DAY
		WEEK
		MONTH
		SOME OTHER PERIOD: _____

128sec. Did you experience any side effects from (this / these) powder(s)?

1 YES

0 NO

CATI CHECK Q94C-H:

R OR OTHERS USED PELLETS / CRYSTALS / GRANULES (Q94C = YES), CONTINUE WITH Q129.

R OR OTHERS DID NOT USE PELLETS / CRYSTALS / GRANULES (Q94C = NO) AND:

➤ USED AEROSOL SPRAYS (GO TO Q148)

➤ USED SPRAYS FROM TRUCKS OR PLANES (GO TO Q167)

- > USED NO-PEST STRIPS (GO TO Q185)
- > USED LIQUIDS (GO TO Q190)
- > USED OTHER PESTICIDES (GO TO Q210)

FIELD USE OF PELLETS, CRYSTALS, OR GRANULES

129. You mentioned that you or someone else used pellets, crystals, or granules around the places where you slept, ate, or worked during [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A] to kill or control pests.

Did you personally set them out or did someone else?

- 1 SELF (CONTINUE WITH Q130)
- 2 SOMEONE ELSE → GO TO CATI CHECK BEFORE Q142
- 3 BOTH → GO TO NEXT Q129u

129u. Were you and the others using all of the same type of pellets / crystals / granules, or different types?

- 1 DIFFERENT → First, I'd like to ask you about the pellets / crystals / granules you personally used. Then we can talk about what others used.  
GO TO Q130.
- 2 SAME → ASK Q129o
- 3 SAME & DIFFERENT → First, I'd like to talk about the pellets/crystals/granules you used along with any usage by others of (this / these) same pellets / crystals / granules. Then I'll ask about any pellets / crystals / granules others used that you did not.  
GO TO Q130

129o. Who were the others that were using pellets / crystals / granules besides you? Was it . . .

[READ LIST]?

(Mark "1" Yes or "0" No for Each Item)

- 01 U.S. military troops,
- 02 Non-U.S. military troops (Allied / International soldiers),
- 03 A local non-military source (such as local contractors), or
- 04 Someone else? – Who?: \_\_\_\_\_

130. How many different pellets / crystals / granules did you (and the others) use at that time?

- 1 1
- 2 2
- 3 3
- 4 4 OR MORE

CATI CHECK: IF Q130 = 1, GO TO Q129r

Q129i. Can you remember your usage of these pellets / crystals / granules individually, or did you use some of these pellets / crystals / granules so interchangeably during [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A] that in thinking back you can't tell them apart?

- 1 REMEMBER INDIVIDUALLY
- 0 USED ALL INTERCHANGEABLY
- 2 SOME INDIVIDUALLY / SOME INTERCHANGEABLY

129r. Do you remember the name of the pellets / crystals / granules that you (and the others) used in [FILL DATES]?

- 1 YES → ASK Q129n
- 0 NO → GO TO Q129a

129n. What is the name of each pellet / crystal / granule you used?

[ SEE PESTICIDE LIST – page 22 ]

Q129a. [IF Q129i = 1 AND Q130 ≥ 2 ASK]

I'd like to ask you about each of these pellets / crystals / granules separately.

[IF Q129i = 0 AND Q130 ≥ 2 ASK]

I'd like to ask you about your use of these pellets / crystals / granules.

[IF Q129i = 2 AND Q130 ≥ 2 ASK]

I'd like to ask you about the one you used separately. Then I'll ask about the other pellets / crystals / granules you used.

[IF Q130 = 1 ASK]

I'd like to ask you about this pellet / crystal / granule.

Q129b. [IF Q129n @1 = d GO TO Q131]

[IF Q129n @1 ≥ 1 AND Q129n @1 < 98 GO TO Q129p]

RESPONDENT USE OF PELLETS / CRYSTALS / GRANULES (Q131 – Q141B)

131. Did (this /these) pellets / crystals / granules have a particular smell?

- 1 YES → ASK Q132
- 0 NO → GO TO Q133

132. Did it smell like [READ LIST]?

- 01 Cooking oil,
  - 02 Rotten eggs or sulfur,
  - 03 Gasoline,
  - 04 Kerosene,
  - 05 Chemicals,
  - 06 Insecticides,
  - 07 Something sweet,
  - 08 Something musty, or
  - 09 Something else? → How would you describe this odor?
- 

133. What color were these pellets / crystals / granules?

- 01 COLORLESS / CLEAR
- 02 DARK BROWN
- 03 LIGHT BROWN
- 04 GREY
- 05 ORANGE
- 06 RED
- 07 WHITE
- 08 OPAQUE / CLOUDY / MILKY
- 09 YELLOW
- 10 OTHER → DESCRIBE: \_\_\_\_\_
- 11 MORE THAN ONE COLOR (USE FOR GROUPS)

129p. Would you describe this pesticide as a pellet, a crystal, or a granule?

- 1 PELLET
- 2 CRYSTAL
- 3 GRANULE

134. Where did you (and the others) get these pellets / crystals / granules from? Were they . . .  
[READ LIST]?

- 01 US military issued,
- 02 from the PX,
- 03 from the US (something you brought with you from the US, from a friend or relative in the US, etc.)
- 04 from fellow US soldiers,
- 05 from international soldiers or a local source (Allied / International Soldiers, local contractors, or other non-US source: Saudis, Turks, Bahraini, Egyptians, Syrians),
- 06 or from some other source? → DESCRIBE: \_\_\_\_\_
- 07 DON'T KNOW

135. Where did you (and the others) put the pellets, crystals, or granules? Did (you / they) put them [READ LIST]?

[ ] SAME LOCATIONS AS R → GO TO Q136

CATI CHECK: IF Q18 = 3 OR 4 ONLY, SKIP OVER OPTIONS C & D BELOW.

YES NO

- 1 0 a. In or near your bednetting, blankets, or sleeping bags
- 1 0 b. In or around your sleeping quarters
- 1 0 c. On the floor in your mess hall / designated eating areas
- 1 0 d. On the table in your mess hall / designated eating areas
- 1 0 e. In other areas where you ate (not counting mess halls/designated eating areas)
- 1 0 f. In or near your work areas
- 1 0 g. In or near your military vehicle
- 1 0 h. In or near your latrine
- 1 0 i. In other areas – Where?

136. During [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A], how often did you personally use these pellets / crystals / granules?

[ ] EVERYDAY

OR

\_\_\_\_\_ # OF TIMES

PER: DAY  
WEEK  
MONTH

SOME OTHER PERIOD: \_\_\_\_\_

CATI CHECK: IF Q129 = 1, GO TO Q137

136A. During [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A], how often did you see others use these pellets / crystals / granules?

[ ] EVERYDAY

OR

\_\_\_\_\_ # TIMES

PER: DAY

WEEK

MONTH

OTHER PERIOD: \_\_\_\_\_

137. During [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A], did you (or others) dispose of the old pellets / crystals / granules?

YES → GO TO 137A

NO → GO TO 138

137A. How did you (or others) dispose of (it / them)?

(Mark "1" Yes or "0" No for Each Item)

1 DUMPED IN OUTSIDE TRASH CONTAINER

2 DUMPED IN INSIDE TRASH CONTAINER

3 DIDN'T HAVE TO DUMP IT BECAUSE WIND WOULD BLOW IT AWAY

4 OTHER - DESCRIBE: \_\_\_\_\_

IF Q136 = EVERYDAY, SKIP TO Q139.

138. Did you personally stop using them during [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A] because [READ LIST]?

(Mark "1" Yes or "0" No for Each Item)

	<u>Yes</u>	<u>No</u>
a. pests stopped being a problem; because	1	0
b. you ran out of pesticides; or	1	0
c. for any other reason?	1	0

Describe: \_\_\_\_\_

139. Did you experience any side effects from (this / these) pellets / crystals / granules?

1 YES → ASK Q139A

0 NO → GO TO Q140



*NOTE FOR TRAINING: PHRASE "STOP USING THESE PELLETS / CRYSTALS / GRANULES" SHOULD BE BYPASSED IF Q136 = "EVERYDAY" OR IF Q138 a-c=NO.*

139A. During this period, did you stop using (this / these) pellets / crystals / granules or reduce the amount you used because of side effects?

1 YES

0 NO

140. Were you ever issued any protective equipment to use when you handled these pellets / crystals / granules?

1 YES → ASK Q140A

0 NO → GO TO NEXT CATI CHECK

140A. Did you use this protective equipment during [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A] when you handled (this / these) pellets / crystals / granules?

1 YES → ASK Q140B

0 NO → GO TO NEXT CATI CHECK

140B. How often did you use this protective equipment? Was it [READ LIST]?

1 Never,

2 Sometimes,

3 Usually, or

4 Always?

CATI: REPEAT Q131 – 140B FOR THE 2<sup>ND</sup> AND 3<sup>RD</sup> PELLETS / CRYSTAL / GRANULE USED BY THE RESPONDENT. INTERVIEWERS, SAY: Now let's talk about the 2<sup>ND</sup> pellet or crystal or granule you used.

ALL OTHERS GO TO CATI CHECK BEFORE Q142.

131b. Did (this / these) pellets / crystals / granules have a particular smell?

1 YES → ASK Q132b

0 NO → GO TO Q133b

132b. Did they smell like [READ LIST]?

- 01 Cooking oil,
  - 02 Rotten eggs or sulfur,
  - 03 Gasoline,
  - 04 Kerosene,
  - 05 Chemicals,
  - 06 Insecticides,
  - 07 Something sweet,
  - 08 Something musty, or
  - 09 Something else? → How would you describe this odor?
- 

133b. What color (was this / were these) pellets / crystals / granules?

- 01 COLORLESS / CLEAR
- 02 DARK BROWN
- 03 LIGHT BROWN
- 04 GREY
- 05 ORANGE
- 06 RED
- 07 WHITE
- 08 OPAQUE / CLOUDY / MILKY
- 09 YELLOW
- 10 OTHER → DESCRIBE: \_\_\_\_\_
- 11 MORE THAN ONE COLOR (USE FOR GROUPS)

129pb. Would you describe this pesticide as a pellet, a crystal, or a granule?

- 1 PELLET
- 2 CRYSTAL
- 3 GRANULE

134b. Where did you (and the others) get these pellets / crystals / granules from? Were they . . .  
[READ LIST]?

- 01 US military issued,
- 02 from the PX,
- 03 from the US (something you brought with you from the US, from a friend or relative in the US, etc.)
- 04 from fellow US soldiers,
- 05 from international soldiers or a local source (Allied / International Soldiers, local contractors, or other non-US source: Saudis, Turks, Bahraini, Egyptians, Syrians),
- 06 or from some other source? → DESCRIBE: \_\_\_\_\_
- 07 DON'T KNOW

135b. Where did you (and the others) put the pellets, crystals, or granules? Did (you / they) put (it / them)  
[READ LIST]?

[ ] SAME LOCATIONS AS R → GO TO Q136b

CATI CHECK: IF Q18 = 3 OR 4 ONLY, SKIP OVER OPTIONS C & D BELOW.

YES NO

- 1 0 a. In or near your bednetting, blankets, or sleeping bags
- 1 0 b. In or around your sleeping quarters
- 1 0 c. On the floor in your mess hall / designated eating areas
- 1 0 d. On the table in your mess hall / designated eating areas
- 1 0 e. In other areas where you ate (not counting mess halls/designated eating areas)
- 1 0 f. In or near your work areas
- 1 0 g. In or near your military vehicle
- 1 0 h. In or near your latrine
- 1 0 i. In other areas – Where?

36b. During [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A], how often did you personally use these pellets / crystals / granules?

[ ] EVERYDAY

OR

\_\_\_\_\_ # OF TIMES

PER: DAY

WEEK

MONTH

SOME OTHER PERIOD: \_\_\_\_\_

CATI CHECK: IF Q129 = 1, GO TO Q137b

136Ab. During [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A], how often did you see others use these pellets / crystals / granules?

[ ] EVERYDAY

OR

\_\_\_\_\_ # TIMES

PER: DAY

WEEK

MONTH

OTHER PERIOD: \_\_\_\_\_

137b. During [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A], did you (or others) dispose of the old pellets / crystals / granules?

YES → GO TO 137Ab

NO → GO TO 138b

137Ab. How did you (and/or others) dispose of (it / them)?

(Mark "1" Yes or "0" No for Each Item)

1 DUMPED IN OUTSIDE TRASH CONTAINER

2 DUMPED IN INSIDE TRASH CONTAINER

3 DIDN'T HAVE TO DUMP IT BECAUSE WIND WOULD BLOW IT AWAY

4 OTHER – DESCRIBE: \_\_\_\_\_

IF Q136b = EVERYDAY, SKIP TO Q139b.

138b. Did you personally stop using them during [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A] because [READ LIST]?

(Mark "1" Yes or "0" No for Each Item)

	<u>Yes</u>	<u>No</u>
a. pests stopped being a problem; because	1	0
b. you ran out of pesticides; or	1	0
c. for any other reason?	1	0

Describe: \_\_\_\_\_

139b. Did you experience any side effects from these pellets / crystals / granules?

- 1 YES → ASK Q139Ab  
0 NO → GO TO Q140b

*NOTE FOR TRAINING: PHRASE "STOP USING THESE PELLETS / CRYSTALS / GRANULES" SHOULD BE BYPASSED IF Q136b = "EVERYDAY" OR IF Q138b a-c = NO.*

139Ab. During this period, did you stop using (this / these) pellets / crystals / granules or reduce the amount you used because of side effects?

- 1 YES  
0 NO

140b. Were you ever issued any protective equipment during [FILL DATES] when you handled (this / these) pellets / crystals / granules?

- 1 YES → ASK Q140Ab  
0 NO → GO TO NEXT CATI CHECK

140Ab. Did you use this protective equipment during [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A] when you handled these pellets / crystals / granules?

- 1 YES → ASK Q140Bb  
0 NO → GO TO NEXT CATI CHECK

140Bb. How often did you use this protective equipment? Was it [READ LIST]?

- 1 Never,
- 2 Sometimes,
- 3 Usually, or
- 4 Always?

CATI: REPEAT Q131b – 140Bb FOR THE 3<sup>RD</sup> PELLETS / CRYSTAL / GRANULE USED BY THE RESPONDENT. INTERVIEWERS, SAY: Now let's talk about the 3<sup>RD</sup> pellet or crystal or granule you used.

OTHERS GO TO CATI CHECK BEFORE Q142

131c. Did (this / these) pellets / crystals / granules have a particular smell?

- 1 YES → ASK Q132c
- 0 NO → GO TO Q133c

132c. Did it smell like [READ LIST]?

- 01 Cooking oil,
  - 02 Rotten eggs or sulfur,
  - 03 Gasoline,
  - 04 Kerosene,
  - 05 Chemicals,
  - 06 Insecticides,
  - 07 Something sweet,
  - 08 Something musty, or
  - 09 Something else? → How would you describe this odor?
-

133c. What color were these pellets / crystals / granules?

- 01 COLORLESS / CLEAR
- 02 DARK BROWN
- 03 LIGHT BROWN
- 04 GREY
- 05 ORANGE
- 06 RED
- 07 WHITE
- 08 OPAQUE / CLOUDY / MILKY
- 09 YELLOW
- 10 OTHER → DESCRIBE: \_\_\_\_\_
- 11 MORE THAN ONE COLOR (USE FOR GROUPS)

129pc. Would you describe this pesticide as a pellet, a crystal, or a granule?

- 1 PELLET
- 2 CRYSTAL
- 3 GRANULE

134c. Where did you (and the others) get these pellets / crystals / granules from? Were they . . .  
[READ LIST]?

- 01 US military issued,
- 02 from the PX,
- 03 from the US (something you brought with you from the US, from a friend or relative in the US, etc.)
- 04 from fellow US soldiers,
- 05 from international soldiers or a local source (Allied / International Soldiers, local contractors, or other non-US source: Saudis, Turks, Bahraini, Egyptians, Syrians),
- 06 or from some other source? → DESCRIBE: \_\_\_\_\_
- 07 DON'T KNOW

135c. Where did you (and the others) put the pellets, crystals, or granules? Did (you / they) put it . . .

[READ LIST]?

CATI CHECK: IF Q18 = 3 OR 4 ONLY, SKIP OVER OPTIONS C & D BELOW.

YES NO

- |   |   |  |
|---|---|--|
| 1 | 0 | a. In or near your bednetting, blankets, or sleeping bags                                |
| 1 | 0 | b. In or around your sleeping quarters   |
| 1 | 0 | c. On the floor in your mess hall / designated eating areas                              |
| 1 | 0 | d. On the table in your mess hall / designated eating areas                              |
| 1 | 0 | e. In <u>other</u> areas where you ate (not counting mess halls/designated eating areas) |
| 1 | 0 | f. In or near your work areas  |
| 1 | 0 | g. In or near your military vehicle  |
| 1 | 0 | h. In or near your latrine   |
| 1 | 0 | i. In other areas – Where?   |

136c. During [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A], how often did you personally use these pellets / crystals / granules?

[ ] EVERYDAY

OR

\_\_\_\_\_ # OF TIMES

PER: DAY  
WEEK  
MONTH

SOME OTHER PERIOD: \_\_\_\_\_

CATI CHECK: IF Q129 = 1, GO TO Q137c

136Ac. During [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A], how often did you see others use these pellets / crystals / granules?

[ ] EVERYDAY

OR

\_\_\_\_\_ # TIMES

PER: DAY  
WEEK  
MONTH

OTHER PERIOD: \_\_\_\_\_



137c. During [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A], did you (or others) dispose of the old pellets / crystals / granules?

YES → GO TO 137Ac

NO → GO TO 138c

137Ac. How did you (or others) dispose of (it / them)?

(Mark "1" Yes or "0" No for Each Item)

1 DUMPED IN OUTSIDE TRASH CONTAINER

2 DUMPED IN INSIDE TRASH CONTAINER

3 DIDN'T HAVE TO DUMP IT BECAUSE WIND WOULD BLOW IT AWAY

4 OTHER – DESCRIBE: \_\_\_\_\_

IF Q136c = EVERYDAY, SKIP TO Q139c.

138c. Did you personally stop using these pellets / crystals / granules during [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A] because [READ LIST]?

(Mark "1" Yes or "0" No for Each Item)

	<u>Yes</u>	<u>No</u>
a. pests stopped being a problem; because	1	0
b. you ran out of pesticides; or	1	0
c. for any other reason?	1	0
Describe: _____		

139c. Did you experience any side effects from (this / these) pellets / crystals / granules?

1 YES → ASK Q139Ac

0 NO → GO TO Q140c

*NOTE FOR TRAINING: PHRASE "STOP USING THESE PELLETS / CRYSTALS / GRANULES" SHOULD BE BYPASSED IF Q136c = "EVERYDAY" OR IF Q138c A-C = NO.*

139Ac. During this period, did you stop using (this / these) pellets / crystals / granules or reduce the amount you used because of side effects?

1 YES

0 NO

140c. Were you ever issued any protective equipment during [FILL DATES] to use when you handled these pellets / crystals / granules?

- 1 YES → ASK Q140Ac
- 0 NO → GO TO NEXT CATI CHECK

140Ac. Did you use this protective equipment during [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A] when you handled (this / these) pellets / crystals / granules?

- 1 YES → ASK Q140Bc
- 0 NO → GO TO NEXT CATI CHECK

140Bc. How often did you use this protective equipment? [READ LIST]?

- 1 Never,
- 2 Sometimes,
- 3 Usually, or
- 4 Always?

PELLETS / CRYSTALS / GRANULES USED BY OTHERS

CATI CHECK: CONTINUE WITH Q142 ONLY IF SOMEONE ELSE SET OUT THE PELLETS, CRYSTALS, OR GRANULES (Q129 = 2 OR 3)

142. You mentioned that someone else used pellets, crystals, or granules at that time. Do you know who did this? Were they. . . [READ LIST]?

(Mark "1" Yes or "0" No for Each Item)

- 01 U.S. military troops,
- 02 Non-U.S. military troops (Allied / International soldiers),
- 03 A local non-military source (such as local contractors), or
- 04 Someone else? – Who?: \_\_\_\_\_

143. To your knowledge, how many different types of pellets, crystals, or granules did they use during that time?

- 1 1
- 2 2
- 3 3
- 4 4 OR MORE

CATI CHECK: IF Q143 = 1, GO TO Q142r

Q142i. Can you remember others' usage of these pellets / crystals / granules individually, or did they use these pellets / crystals / granules so interchangeably during [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A] that in thinking back you can't tell them apart?

- 1 REMEMBER INDIVIDUALLY
- 0 USED ALL INTERCHANGEABLY
- 2 SOME INDIVIDUALLY / SOME INTERCHANGEABLY

142r. Do you know the name(s) of the pellets, crystals, or granules that were used by others?

- 1 YES → ASK Q142n
- 0 NO → GO TO Q144

142n. What is the name of each pellet / crystal / granule used by others?

[ SEE PESTICIDE LIST – page 22 ]

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Q142intro. [IF Q142i = 1 OR Q143 ≥ 2 ASK]  
I'd like to ask you about each of these pellets / crystals / granules separately.

[IF Q142i = 0 AND Q143 ≥ 2 ASK]  
I'd like to ask you about their use of these pellets / crystals / granules.

[IF Q143 = 1 ASK]  
I'd like to ask you about this pellet / crystal / granule.

Q142b. [IF Q142n @1 = 98 or d GO TO Q144]

[IF Q142n @1 ≥ 1 AND Q142n @1 < 98 GO TO Q142p]

144. Did this pellet / crystal / granule have a particular smell?

- 1 YES → ASK Q144A
- 0 NO → GO TO Q145

144A. Did it smell like [READ LIST]?

- 01 Cooking oil,
- 02 Rotten eggs or sulfur,
- 03 Gasoline,
- 04 Kerosene,
- 05 Chemicals,
- 06 Insecticides,
- 07 Something sweet,
- 08 Something musty, or
- 09 Something else? → How would you describe this odor?

145. What color was this pellet / crystal / granule?

- 01 COLORLESS / CLEAR
- 02 DARK BROWN
- 03 LIGHT BROWN
- 04 GREY
- 05 ORANGE
- 06 RED
- 07 WHITE
- 08 OPAQUE / CLOUDY / MILKY
- 09 YELLOW
- 10 OTHER → DESCRIBE: \_\_\_\_\_
- 11 MORE THAN ONE COLOR (USE FOR GROUPS)

142p. Would you describe this pesticide as a pellet, a crystal, or a granule?

- 1 PELLET
- 2 CRYSTAL
- 3 GRANULE

146. Where did they put the pellets, crystals, or granules? Did they put it [READ LIST]?

[ ] SAME LOCATIONS AS R → GO TO Q147

CATI CHECK: IF Q18 = 3 OR 4 ONLY, SKIP OVER OPTIONS C & D BELOW.

YES NO

- |   |   |  |
|---|---|--|
| 1 | 0 | a. In or near your bednetting, blankets, or sleeping bags                                  |
| 1 | 0 | b. In or around your sleeping quarters   |
| 1 | 0 | c. On the floor in your mess hall / designated eating area                                 |
| 1 | 0 | d. On the table in your mess hall / designated eating area                                 |
| 1 | 0 | e. In <u>other</u> areas where you ate (not counting mess halls / designated eating areas) |
| 1 | 0 | f. In or near your work areas  |
| 1 | 0 | g. In or near your military vehicle  |
| 1 | 0 | h. In or near your latrine   |
| 1 | 0 | i. In other areas – Where?   |

147. During [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A], how often did you see others use these pellets, crystals, or granules?

[ ] EVERYDAY

OR

_____ # OF TIMES	PER:	DAY
		WEEK
		MONTH
		SOME OTHER PERIOD: _____

147sea. Did you experience any side effects from (this / these) pellets / crystals / granules ?

- |   |     |
|---|-----|
| 1 | YES |
| 0 | NO  |

CATI CHECK: REPEAT Q144 – Q147 FOR THE 2<sup>ND</sup> AND 3<sup>RD</sup> PELLETS / CRYSTALS / GRANULES OTHERS USED.

INTERVIEWERS SAY: Now let's talk about the 2<sup>ND</sup> pellet / crystal / granule they used.

OTHERS GO TO CATI CHECK BEFORE Q148.

144b. Did it have a particular smell?

1 YES → ASK Q144Ab

0 NO → GO TO Q145b

144Ab. Did it smell like [READ LIST]?

- 01 Cooking oil,
  - 02 Rotten eggs or sulfur,
  - 03 Gasoline,
  - 04 Kerosene,
  - 05 Chemicals,
  - 06 Insecticides,
  - 07 Something sweet,
  - 08 Something musty, or
  - 09 Something else? → How would you describe this odor?
- 

145b. What color was this pellet / crystal / granule?

- 01 COLORLESS / CLEAR
- 02 DARK BROWN
- 03 LIGHT BROWN
- 04 GREY
- 05 ORANGE
- 06 RED
- 07 WHITE
- 08 OPAQUE / CLOUDY / MILKY
- 09 YELLOW
- 10 OTHER → DESCRIBE: \_\_\_\_\_
- 11 MORE THAN ONE COLOR (USE FOR GROUPS)

142pb. Would you describe this pesticide as a pellet, a crystal, or a granule?

- 1 PELLET
- 2 CRYSTAL
- 3 GRANULE

146b. Where did they put the pellets, crystals, or granules? Did they put it [READ LIST]?

[ ] SAME LOCATIONS AS R → GO TO Q147b

CATI CHECK: IF Q18 = 3 OR 4 ONLY, SKIP OVER OPTIONS C & D BELOW.

YES NO

- 1 0 a. In or near your bednetting, blankets, or sleeping bags
- 1 0 b. In or around your sleeping quarters
- 1 0 c. On the floor in your mess hall / designated eating area
- 1 0 d. On the table in your mess hall / designated eating area
- 1 0 e. In other areas where you ate (not counting mess halls / designated eating areas)
- 1 0 f. In or near your work areas
- 1 0 g. In or near your military vehicle
- 1 0 h. In or near your latrine
- 1 0 i. In other areas – Where?

147b. During [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A], how often did you personally see the pellets, crystals, or granules?

[ ] EVERYDAY

OR

\_\_\_\_\_ # OF TIMES

PER: DAY  
WEEK  
MONTH

SOME OTHER PERIOD: \_\_\_\_\_

147seb. Did you experience any side effects from (this / these) pellet(s) / crystal(s) / granule(s) ?

- 1 YES
- 0 NO

CATI CHECK: REPEAT Q144 – Q147 FOR THE 3<sup>RD</sup> PELLETS / CRYSTALS /  
GRANULES OTHERS USED.  
INTERVIEWERS, SAY: Now let's talk about the 3<sup>rd</sup> pellet / crystal / granule they used.

OTHERS GO TO CATI CHECK BEFORE Q148.

144c. Did this pellet / crystal / granule have a particular smell?

- 1 YES → ASK Q144Ac
- 0 NO → GO TO Q145c

144Ac. Did it smell like [READ LIST]?

- 01 Cooking oil,
  - 02 Rotten eggs or sulfur,
  - 03 Gasoline,
  - 04 Kerosene,
  - 05 Chemicals,
  - 06 Insecticides,
  - 07 Something sweet,
  - 08 Something musty, or
  - 09 Something else? → How would you describe this odor?
- 

145c. What color (was this / were these) pellet(s) / crystal(s) / granule(s)?

- 01 COLORLESS / CLEAR
- 02 DARK BROWN
- 03 LIGHT BROWN
- 04 GREY
- 05 ORANGE
- 06 RED
- 07 WHITE
- 08 OPAQUE / CLOUDY / MILKY
- 09 YELLOW
- 10 OTHER → DESCRIBE: \_\_\_\_\_
- 11 MORE THAN ONE COLOR (USE FOR GROUPS)



142pc. Would you describe this pesticide as a pellet, a crystal, or a granule?

- 1 PELLET
- 2 CRYSTAL
- 3 GRANULE

146c. Where did they put the pellets, crystals, or granules? Did they put it [READ LIST]?

[ ] SAME LOCATIONS AS R → GO TO Q147c

CATI CHECK: IF Q18 = 3 OR 4 ONLY, SKIP OVER OPTIONS C & D BELOW.

YES NO

- 1 0 a. In or near your bednetting, blankets, or sleeping bags
- 1 0 b. In or around your sleeping quarters
- 1 0 c. On the floor in your mess hall / designated eating areas
- 1 0 d. On the table in your mess hall / designated eating areas
- 1 0 e. In other areas where you ate (not counting mess halls/designated eating areas)
- 1 0 f. In or near your work areas
- 1 0 g. In or near your military vehicle
- 1 0 h. In or near your latrine
- 1 0 i. In other areas – Where?

147c. During [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A], how often did you personally see the pellets, crystals, or granules?

[ ] EVERYDAY

OR

\_\_\_\_\_ # OF TIMES

PER:

DAY

WEEK

MONTH

SOME OTHER PERIOD: \_\_\_\_\_

147sec. Did you experience any side effects from (this / these) pellet(s) / crystal(s) / granule(s) ?

- 1 YES
- 0 NO

CATI CHECK Q94d-h:

R OR OTHERS USED AEROSOL SPRAYS (Q94d = YES), ASK Q148.

R OR OTHERS DID NOT USE AEROSOL SPRAYS (Q94d = NO) BUT USED SPRAYS FROM TRUCKS OR PLANES, OR HAND-HELD SPRAYERS (Q94e = YES), GO TO Q167.

R OR OTHERS DID NOT USE SPRAYS (Q94d = NO) BUT USED NO-PEST STRIPS (Q94f = YES), GO TO Q185.

R OR OTHERS DID NOT USE SPRAYS (Q94d = NO) BUT USED LIQUIDS (Q94g = YES), GO TO Q190.

R OR OTHERS DID NOT USE SPRAYS (Q94d = NO) BUT USED OTHER PESTICIDES (Q94h = YES), GO TO Q210.

FIELD USE OF AEROSOL SPRAYS

148. You mentioned that you or someone else used aerosol sprays around the places where you slept, ate, or worked during [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A] to kill or control pests.

Did you personally use them or did someone else do this?

- 1 SELF → GO TO 149
- 2 SOMEONE ELSE → GO TO CATI CHECK BEFORE 160
- 3 BOTH → GO TO 148u

148u. Were you and the others using the same type of aerosol sprays, or different types?

- 1 DIFFERENT → First, I'd like to ask you about the aerosol sprays you personally used. Then we can talk about what others used.  
GO TO Q149
- 2 SAME → ASK Q148o, THEN GO TO Q149
- 3 SAME & DIFFERENT → First, I'd like to talk about the aerosol sprays you used, along with any usage by others of (this / these) same aerosol sprays. Then I'll ask about any aerosol sprays that others used that you did not. GO TO Q149

148o. Who were the others that were using aerosol sprays besides you? Was it . . . [READ LIST]?

(Mark "1" Yes or "0" No for Each Item)

01 U.S. military troops,

02 Non-U.S. military troops (Allied / International soldiers),

03 A local non-military source (such as local contractors), or

04 Someone else? – Who?: \_\_\_\_\_

149. How many different aerosol sprays did you and the others use at that time?

1 1

2 2

3 3

4 4 OR MORE

CATI CHECK: IF Q149 = 1, GO TO Q148r

Q148i. Can you remember your usage of these aerosol sprays individually, or did you use these aerosol sprays so interchangeably during [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A] that in thinking back you can't tell them apart?

1 REMEMBER INDIVIDUALLY

0 USED ALL INTERCHANGEABLY

2 SOME INDIVIDUALLY / SOME INTERCHANGEABLY

148r. Do you remember the name of the aerosol sprays that you and the others used in [FILL DATES]?

1 YES → ASK Q148n

0 NO → GO TO Q148a

Q148n. What is the name of each aerosol spray that you (and others) used?

[ SEE PESTICIDE LIST – page 22 ]

Q148a. [IF Q148i = 1 AND Q149  $\geq$  2 ASK]

I'd like to ask you about each of these aerosol sprays separately.

[IF Q148i = 0 AND Q149  $\geq$  2 ASK]

I'd like to ask you about your use of these aerosol sprays.

[IF Q148i = 2 AND Q149  $\geq$  2 ASK]

I'd like to ask you about the one you used separately. Then I'll ask about the other aerosol sprays you used.

[IF Q149 = 1 ASK]

I'd like to ask you about this aerosol spray.

Q148b. [IF Q148n @1 = d GO TO Q150]

[IF Q148n @1  $\geq$  1 AND Q148n @1 < 98 GO TO Q148p]

150. Did (this / these) aerosol spray(s) have a particular smell?

1 YES  $\rightarrow$  ASK Q151

0 NO  $\rightarrow$  GO TO Q153

151. Did it smell like [READ LIST]?

01 Cooking oil,

02 Rotten eggs or sulfur,

03 Gasoline,

04 Kerosene,

05 Chemicals,

06 Insecticides,

07 Something sweet,

08 Something musty, or

09 Something else?  $\rightarrow$  How would you describe this odor?

---

153. Where did you (and the others) get the aerosol spray(s)? Was it . . . [READ LIST]?

- 01 US military issued,
- 02 from the PX,
- 03 from the US (something you brought with you from the US, from a friend or relative in the US, etc.)
- 04 from fellow US soldiers,
- 05 from international soldiers or a local source (Allied / International Soldiers, local contractors, or other non-US source: Saudis, Turks, Bahraini, Egyptians, Syrians),
- 06 or from some other source? → DESCRIBE: \_\_\_\_\_
- 07 DON'T KNOW

154. Where did you (and the others) put the aerosol spray? Did you put it . . . [READ LIST]?

CATI CHECK: IF Q18 = 3 OR 4 ONLY, SKIP OVER OPTIONS C & D BELOW.

YES NO

- 1 0 a. In or near your bednetting, blankets, or sleeping bags
- 1 0 b. In or around your sleeping quarters
- 1 0 c. On the floor in your mess hall / designated eating area
- 1 0 d. On the table in your mess hall / designated eating area
- 1 0 e. In other areas where you ate (not counting mess halls / designated eating areas)
- 1 0 f. In or near your work areas
- 1 0 g. In or near your military vehicle
- 1 0 h. In or near your latrine
- 1 0 i. In other areas – Where?

155. During [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A], how often did you personally use these sprays?

[ ] EVERYDAY

OR

\_\_\_\_\_ # OF TIMES

PER: DAY  
WEEK  
MONTH

SOME OTHER PERIOD: \_\_\_\_\_

ASK Q155A ONLY IF Q148 = 3 AND Q148n = 2

155A. During [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A], how often did you see others use these sprays?

[ ] EVERYDAY

OR

\_\_\_\_\_ # TIMES

PER: DAY

WEEK

MONTH

OTHER PERIOD: \_\_\_\_\_

156. During [MONTH], did you (or others) dispose of the old sprays?

YES → GO TO Q156A

NO → GO TO Q157

156A. How did you (or others) dispose of (it / them)?

(Mark "1" Yes or "0" No for Each Item)

1 DUMPED IN OUTSIDE TRASH CONTAINER

2 DUMPED IN INSIDE TRASH CONTAINER

3 DIDN'T HAVE TO DUMP IT BECAUSE WIND WOULD BLOW IT AWAY

4 OTHER – DESCRIBE: \_\_\_\_\_

IF Q155 = EVERYDAY, SKIP TO Q158.

157. Did you personally stop using these aerosol sprays during [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A] because [READ LIST]?

(Mark "1" Yes or "0" No for Each Item)

	<u>Yes</u>	<u>No</u>
a. pests stopped being a problem; because	1	0
b. you ran out of pesticides; or	1	0
c. for any other reason?	1	0

Describe: \_\_\_\_\_

158. Did you experience any side effects from (this / these) spray(s)?

1 YES → ASK Q158A

0 NO → GO TO Q159

*NOTE FOR TRAINING: PHRASE "STOP USING THESE SPRAYS" SHOULD BE BYPASSED IF Q155 = "EVERYDAY" OR IF Q157 a-c = NO.*

158A. During this period, did you stop using (this / these) spray(s) or reduce the amount you used because of side effects?

1 YES

0 NO

159. Were you ever issued any protective equipment during [FILL DATES] when you handled (this / these) spray(s)?

1 YES → ASK Q159A

0 NO → GO TO NEXT CATI CHECK

159A. Did you use this protective equipment during [MONTH] when you handled these sprays?

1 YES → ASK Q159B

0 NO → GO TO NEXT CATI CHECK

159B. How often did you use this protective equipment? Was it [READ LIST]?

1 Never,

2 Sometimes,

3 Usually, or

4 Always?

CATI: REPEAT Q150 – A159B FOR THE 2<sup>ND</sup> AND 3<sup>RD</sup> SPRAYS USED BY THE RESPONDENT.  
INTERVIEWERS, SAY: Now let's talk about the 2<sup>ND</sup> spray you used.

OTHERS GO TO CATI CHECK BEFORE Q167.

150b. Did (this / these) spray(s) have a particular smell?

1 YES → ASK Q151b

0 NO → GO TO Q153b

151b. Did it smell like [READ LIST]?

- 01 Cooking oil,
  - 02 Rotten eggs or sulfur,
  - 03 Gasoline,
  - 04 Kerosene,
  - 05 Chemicals,
  - 06 Insecticides,
  - 07 Something sweet,
  - 08 Something musty, or
  - 09 Something else? → How would you describe this odor?
- 

153b. Where did you (and the others) get the spray? Was it . . . [READ LIST]?

*(Enter 1 for All that Apply)*

- 01 US military issued,
- 02 from the PX,
- 03 from the US (something you brought with you from the US, from a friend or relative in the US, etc.)
- 04 from fellow US soldiers,
- 05 from international soldiers or a local source (Allied / International Soldiers, local contractors, or other non-US source: Saudis, Turks, Bahraini, Egyptians, Syrians),
- 06 or from some other source? → DESCRIBE: \_\_\_\_\_
- 07 DON'T KNOW

154b. Where did you (and the others) put the spray? Did you put it . . . [READ LIST]?

CATI CHECK: IF Q18 = 3 OR 4 ONLY, SKIP OVER OPTIONS C & D BELOW.

YES NO

- |   |   |  |
|---|---|--|
| 1 | 0 | a. In or near your bednetting, blankets, or sleeping bags                                  |
| 1 | 0 | b. In or around your sleeping quarters   |
| 1 | 0 | c. On the floor in your mess hall / designated eating area                                 |
| 1 | 0 | d. On the table in your mess hall / designated eating area                                 |
| 1 | 0 | e. In <u>other</u> areas where you ate (not counting mess halls / designated eating areas) |



- 1     0     f. In or near your work areas
- 1     0     g. In or near your military vehicle
- 1     0     h. In or near your latrine
- 1     0     i. In other areas – Where?

CATI CHECK: ASK Q155b ONLY IF Q148 = 3 & Q148u = 2; IF SELF, SKIP TO 156b

155b. During [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A], how often did you personally use these sprays?

[ ] EVERYDAY

OR

\_\_\_\_\_ # OF TIMES                      PER:     DAY  
   WEEK  
   MONTH  
   SOME OTHER PERIOD: \_\_\_\_\_

155Ab. During [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A], how often did you see others use these sprays?

[ ] EVERYDAY

OR

\_\_\_\_\_ # TIMES                      PER:     DAY  
   WEEK  
   MONTH  
   OTHER PERIOD: \_\_\_\_\_

156b. During [MONTH], did you (or others) dispose of the old sprays?

YES → GO TO 156Ab

NO → GO TO 157b

156Ab. How did you (or others) dispose of (it / them)?

(Mark "1" Yes or "0" No for Each Item)

- 1     DUMPED IN OUTSIDE TRASH CONTAINER
- 2     DUMPED IN INSIDE TRASH CONTAINER
- 3     DIDN'T HAVE TO DUMP IT BECAUSE WIND WOULD BLOW IT AWAY
- 4     OTHER – DESCRIBE: \_\_\_\_\_

IF Q155b = EVERYDAY, SKIP TO Q158b.

157b. Did you personally stop using these aerosol sprays during [RANDOM MONTH, FIRST / LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A] because [READ LIST]?

(Mark "1" Yes or "0" No for Each Item)

	<u>Yes</u>	<u>No</u>
a. pests stopped being a problem; because	1	0
b. you ran out of pesticides; or	1	0
c. for any other reason?	1	0

Describe: \_\_\_\_\_

158b. Did you experience any side effects from (this / these) spray(s)?

- 1 YES → ASK Q158Ab  
0 NO → GO TO Q159b

*NOTE FOR TRAINING: PHRASE "STOP USING THESE SPRAYS" SHOULD BE BYPASSED IF Q155b = "EVERYDAY" OR IF Q157b A-C = NO.*

158Ab. During this period, did you stop using (this / these) spray(s) or reduce the amount you used because of side effects?

- 1 YES  
0 NO

159b. Were you ever issued any protective equipment during [FILL MONTH] to use when you handled (this / these) spray(s)?

- 1 YES → ASK Q159Ab  
0 NO → GO TO NEXT CATI CHECK

159Ab. Did you use this protective equipment during [MONTH] when you handled these sprays?

- 1 YES → ASK Q159Bb  
0 NO → GO TO NEXT CATI CHECK

159Bb. How often did you use this protective equipment? Was it [READ LIST]?

- 1 Never,
- 2 Sometimes,
- 3 Usually, or
- 4 Always

CATI: REPEAT Q150 – 159Bb FOR THE 3<sup>RD</sup> SPRAY USED BY THE RESPONDENT. INTERVIEWERS, SAY:  
Now let's talk about the 3<sup>rd</sup> spray you used.

150c. Did this spray have a particular smell?

- 1 YES → ASK Q151c
- 0 NO → GO TO Q153c

151c. Did it smell like [READ LIST]?

- 01 Cooking oil,
  - 02 Rotten eggs or sulfur,
  - 03 Gasoline,
  - 04 Kerosene,
  - 05 Chemicals,
  - 06 Insecticides,
  - 07 Something sweet,
  - 08 Something musty, or
  - 09 Something else? → How would you describe this odor?
- 

153c. Where did you (and the others) get this spray? Was it . . . [READ LIST]?

*(Mark All That Apply)*

- 01 US military issued,
- 02 from the PX,
- 03 from the US (something you brought with you from the US, from a friend or relative in the US, etc.)
- 04 from fellow US soldiers,
- 05 from international soldiers or a local source (Allied / International Soldiers, local contractors, or other non-military source: Saudis, Turks, Bahraini, Egyptians, Syrians),
- 06 or from some other source? → DESCRIBE: \_\_\_\_\_
- 07 DON'T KNOW

154c. Where did you (and the others) put the spray? Did you put it . . . [READ LIST]?

CATI CHECK: IF Q18 = 3 OR 4 ONLY, SKIP OVER OPTIONS C & D BELOW.

YES NO

- |   |   |  |
|---|---|--|
| 1 | 0 | a. In or near your bednetting, blankets, or sleeping bags                                  |
| 1 | 0 | b. In or around your sleeping quarters   |
| 1 | 0 | c. On the floor in your mess hall / designated eating area                                 |
| 1 | 0 | d. On the table in your mess hall / designated eating area                                 |
| 1 | 0 | e. In <u>other</u> areas where you ate (not counting mess halls / designated eating areas) |
| 1 | 0 | f. In or near your work areas  |
| 1 | 0 | g. In or near your military vehicle  |
| 1 | 0 | h. In or near your latrine   |
| 1 | 0 | i. In other areas – Where?   |

155c. During [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A], how often did you personally use these sprays?

[ ] EVERYDAY

OR

_____ # OF TIMES	PER:	DAY
		WEEK
		MONTH
		SOME OTHER PERIOD: _____

CATI CHECK: ASK 155Ac ONLY IF Q148 = 3 & Q148u = 2.

155Ac. During [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A], how often did you see others use these sprays?

[ ] EVERYDAY

OR

_____ # TIMES	PER:	DAY
		WEEK
		MONTH
		OTHER PERIOD: _____

156c. During [MONTH], did you (or others) dispose of the old sprays?

YES → GO TO 156Ac

NO → GO TO 157c

156Ac. How did (you/they) dispose of them?

(Mark "1" Yes or "0" No for Each Item)

1 DUMPED IN OUTSIDE TRASH CONTAINER

2 DUMPED IN INSIDE TRASH CONTAINER

3 DIDN'T HAVE TO DUMP IT BECAUSE WIND WOULD BLOW IT AWAY

4 OTHER – DESCRIBE: \_\_\_\_\_

IF Q155c = EVERYDAY, SKIP TO Q158c.

157c. Did you personally stop using these aerosol sprays during [RANDOM MONTH, FIRST / LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A] because [READ LIST]?

(Mark "1" Yes or "0" No for Each Item)

	<u>Yes</u>	<u>No</u>
a. pests stopped being a problem; because	1	0
b. you ran out of pesticides; or	1	0
c. for any other reason?	1	0
Describe: _____		

158c. Did you experience any side effects from (this / these) spray(s)?

1 YES → ASK Q158Ac

0 NO → GO TO Q159c

*NOTE FOR TRAINING: PHRASE "STOP USING THESE SPRAYS" SHOULD BE BYPASSED IF Q155c = "EVERYDAY" OR IF Q157c A-C = NO.*

158Ac. During this period, did you stop using (this / these) spray(s) or reduce the amount you used because of side effects?

1 YES

0 NO

159c. Were you ever issued protective equipment during [FILL MONTH] when you handled (this / these) spray(s)?

- 1 YES → ASK Q159Ac
- 0 NO → GO TO NEXT CATI CHECK

159Ac. Did you use this protective equipment during [RANDOM MONTH, FIRST / LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A] when you handled (this / these) spray(s)?

- 1 YES → ASK Q159Bc
- 0 NO → GO TO NEXT CATI CHECK

159Bc. How often during that time did you use this protective equipment? Was it . . . [READ LIST]?

- 1 Never,
- 2 Sometimes,
- 3 Usually, or
- 4 Always

160. You mentioned that someone else used aerosol sprays at that time. Do you know who did this? Were they . . . [READ LIST]:

(Mark "1" Yes or "0" No for Each Item)

- 01 U.S. military troops,
- 02 Non-U.S. military troops (Allied / International soldiers),
- 03 A local non-military source (such as local contractors), or
- 04 Someone else? – Who?: \_\_\_\_\_

161. To your knowledge, how many different types of aerosol sprays did they use during that time?

- 1 1
- 2 2
- 3 3
- 4 4 OR MORE

CATI CHECK: IF Q161 = 1 GO TO Q160r

Q160i. Can you remember others' usage of each of these aerosol sprays individually, or did they use these aerosol sprays so interchangeably during [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A] that in thinking back you can't tell them apart?

- 1 REMEMBER INDIVIDUALLY
- 0 USED ALL INTERCHANGEABLY
- 3 SOME INDIVIDUALLY / SOME INTERCHANGEABLY

160r. Do you know the name(s) of the aerosol spray(s) that others used?

- 1 YES
- 0 NO

160n. What is the name of each aerosol spray they used?

[ SEE PESTICIDE LIST – page 22 ]

---

160intro. [IF Q160i = 1 AND Q161  $\geq$  2 ASK]  
I'd like to ask you about each of these aerosol sprays separately.

[IF Q160i = 0 AND Q161  $\geq$  2 ASK]  
I'd like to ask you about their use of these aerosol sprays.

[IF Q161 = 1 ASK]  
I'd like to ask you about this aerosol spray.

160b. [IF Q160n @1 = 98 or d GO TO Q162]

[IF Q160n @1  $\geq$  1 AND Q160n @1 < 98 GO TO Q160p]

162. Did this aerosol spray have a particular smell?

- 1 YES → ASK Q162A
- 0 NO → GO TO Q164

162A. Did it smell like [READ LIST]?

- 01 Cooking oil,
  - 02 Rotten eggs or sulfur,
  - 03 Gasoline,
  - 04 Kerosene,
  - 05 Chemicals,
  - 06 Insecticides,
  - 07 Something sweet,
  - 08 Something musty, or
  - 09 Something else? → How would you describe this odor?
- 

164. Where did they put the aerosol spray(s)? Did they put it . . . [READ LIST]?

CATI CHECK: IF Q18 = 3 OR 4 ONLY, SKIP OVER OPTIONS C & D BELOW.

[ ] IN ALL OF THE SAME LOCATION AS R => GO TO Q165

YES NO

- 1 0 a. In or near your bednetting, blankets, or sleeping bags
- 1 0 b. In or around your sleeping quarters
- 1 0 c. On the floor in your mess hall / designated eating area
- 1 0 d. On the table in your mess hall / designated eating area
- 1 0 e. In other areas where you ate (not counting mess halls / designated eating areas)
- 1 0 f. In or near your work areas
- 1 0 g. In or near your military vehicle
- 1 0 h. In or near your latrine
- 1 0 i. In other areas – Where?

165. During [FILL DATES], how often did you see others use this aerosol spray?

[ ] EVERYDAY

OR

\_\_\_\_\_ # TIMES

PER: DAY

WEEK

MONTH

OTHER PERIOD: \_\_\_\_\_



165sea. Did you experience any side effects from (this / these) aerosol spray(s)?

1 YES

0 NO

CATI CHECK: REPEAT Qs FOR 2<sup>ND</sup> AEROSOL SPRAY THAT OTHERS USED.  
ALL OTHERS GO TO NEXT CATI CHECK.

162b. Did this aerosol spray have a particular smell?

1 YES → ASK Q162Ab

0 NO → GO TO Q164b

162Ab. Did it smell like [READ LIST]?

01 Cooking oil,

02 Rotten eggs or sulfur,

03 Gasoline,

04 Kerosene,

05 Chemicals,

06 Insecticides,

07 Something sweet,

08 Something musty, or

09 Something else? → How would you describe this odor?

---

164b. Where did they put the aerosol spray(s)? Did they put it . . . [READ LIST]?

CATI CHECK: IF Q18 = 3 OR 4 ONLY, SKIP OVER OPTIONS C & D BELOW.

[ ] IN ALL OF THE SAME LOCATION AS R => GO TO Q165b

YES NO

1 0 a. In or near your bednetting, blankets, or sleeping bags

1 0 b. In or around your sleeping quarters

1 0 c. On the floor in your mess hall / designated eating area

1 0 d. On the table in your mess hall / designated eating area

1 0 e. In other areas where you ate (not counting mess halls /  
designated eating areas)

1 0 f. In or near your work areas

1 0 g. In or near your military vehicle

- 1 0 h. In or near your latrine  
1 0 i. In other areas – Where?

165h. During [FILL DATES], how often did you see others use this aerosol spray?

[ ] EVERYDAY

OR

\_\_\_\_\_ # TIMES

PER: DAY

WEEK

MONTH

OTHER PERIOD: \_\_\_\_\_

Q165c. During [FILL DATES], how often did you see others use this aerosol spray?

[ ] EVERYDAY

OR

\_\_\_\_\_ # TIMES

PER: DAY

WEEK

MONTH

OTHER PERIOD: \_\_\_\_\_

165seb. Did you experience any side effects from (this / these) aerosol spray(s)?

1 YES

0 NO

CATI CHECK: REPEAT Qs FOR 3<sup>RD</sup> AEROSOL SPRAY THAT OTHERS USED.  
ALL OTHERS GO TO NEXT CATI CHECK.

162c. Did this aerosol spray have a particular smell?

1 YES → ASK Q162Ac

0 NO → GO TO Q164c

162Ac. Did it smell like [READ LIST]?

01 Cooking oil,

02 Rotten eggs or sulfur,

03 Gasoline,

04 Kerosene,

05 Chemicals,

06 Insecticides,

07 Something sweet,

08 Something musty, or

09 Something else? → How would you describe this odor?

164c. Where did they put the aerosol spray(s)? Did they put it . . . [READ LIST]?

CATI CHECK: IF Q18 = 3 OR 4 ONLY, SKIP OVER OPTIONS C &amp; D BELOW.

[ ] IN ALL OF THE SAME LOCATION AS R =&gt; GO TO Q165sec

YES NO

- |   |   |  |
|---|---|--|
| 1 | 0 | a. In or near your bednetting, blankets, or sleeping bags                                  |
| 1 | 0 | b. In or around your sleeping quarters   |
| 1 | 0 | c. On the floor in your mess hall / designated eating area                                 |
| 1 | 0 | d. On the table in your mess hall / designated eating area                                 |
| 1 | 0 | e. In <u>other</u> areas where you ate (not counting mess halls / designated eating areas) |
| 1 | 0 | f. In or near your work areas  |
| 1 | 0 | g. In or near your military vehicle  |
| 1 | 0 | h. In or near your latrine   |
| 1 | 0 | i. In other areas – Where?   |

165sec. Did you experience any side effects from (this / these) aerosol spray(s)?

1 YES

0 NO

FIELD USE OF SPRAYS (HAND-HELD OR SPRAYING / FOGGING BY PLANES OR TRUCKS)167. You mentioned that you or someone else used a hand-held sprayer, truck fogger, or plane fogger to apply pesticides in or around the area where you slept, ate, or worked. Did you personally do this, or did someone else?

- 1 SELF → CONTINUE WITH Q168w  
 2 SOMEONE ELSE → GO TO Q179  
 3 BOTH → GO TO Q167w

167w. Which did you use: hand-held sprayer, truck fogger, or plane fogger?  
(Enter 1 for All that Apply)

- 1 HAND-HELD SPRAYER  
 2 TRUCK FOGGER  
 3 PLANE FOGGER

167r. Do you remember the name of the spray used in the hand-held sprayer / truck fogger / plane fogger during [FILL MONTH]?

1 YES → ASK Q167n

0 NO → GO TO Q168

167n. What is the name of the spray you used?

[ SEE PESTICIDE LIST – page 22 ]

IF NAME OF SPRAY(S) KNOWN, GO TO Q170

IF NAME OF SPRAY(S) UNKNOWN, CONTINUE TO Q168

168. Did the spray used in the hand-held sprayer / truck fogger / plane fogger have a particular smell?

1 YES → ASK Q169

0 NO → GO TO Q170

169. Did it smell like . . . [READ LIST]?

01 Cooking oil,

02 Rotten eggs or sulfur,

03 Gasoline,

04 Kerosene,

05 Chemicals,

06 Insecticides,

07 Something sweet,

08 Something musty, or

09 Something else? → How would you describe this odor? \_\_\_\_\_

170. Where did you get the spray? Was it . . . [READ LIST]?

(Enter 1 for All that Apply)

01 US military issued,

02 from the PX,

03 from the US (something you brought with you from the US, from a friend or relative in the US, etc.)

04 from fellow US soldiers,

05 from international soldiers or a local source (Allied / International Soldiers, local contractors, or other non-US source: Saudis, Turks, Bahraini, Egyptians, Syrians),

06 or from some other source? → DESCRIBE: \_\_\_\_\_

07 DON'T KNOW

171. Where did you put the spray using the hand-held sprayer / truck fogger / plane fogger?

Did you spray it [READ APPROPRIATE CATEGORIES]?

CATI CHECK: IF Q18 = 3 OR 4 ONLY, SKIP OVER OPTION E BELOW.

YES NO

- 1 0 a. Over the camp? (ASK ONLY IF Q167w @p = 1 – plane fogging only)
- 1 0 b. On the ground inside your camp? (ASK b ONLY IF Q167w @t = 1)
- 1 0 c. Around the camp perimeter? (ASK c ONLY IF Q167w @t = 1)

[ ASK THE FOLLOWING ONLY IF Q167w @h = 1 – hand-held sprayer ]

- 1 0 d. In or around your sleeping quarters
- 1 0 e. In or around your mess hall or other designated eating area
- 1 0 f. In other areas where you ate (not counting mess halls  
and designated eating areas)
- 1 0 g. In or near your work areas
- 1 0 h. In or near your military vehicle
- 1 0 i. In or near your latrine
- 1 0 j. In other areas – Where?

172. During [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A],  
how often did you spray using the hand-held sprayer / truck fogger /  
plane fogger [FILL 1) hand-held sprayer OR 2) plane / truck]?

[ ] EVERYDAY

OR

\_\_\_\_\_ # OF TIMES

PER:

DAY

WEEK

MONTH

SOME OTHER PERIOD: \_\_\_\_\_

IF Q172 = EVERYDAY, SKIP TO Q174.

173. Did you stop using this spray during [RANDOM DATE OR DATES IN 11A] because  
[READ LIST]?

(Mark "1" Yes or "0" No for Each Item)

- |   | <u>Yes</u> | <u>No</u> |
|---|------------|-----------|
| a. pests stopped being a problem, because | 1          | 0         |
| b. you ran out of pesticides; or          | 1          | 0         |
| c. for any other reason?                  | 1          | 0         |

Describe: \_\_\_\_\_

174. Did you experience any side effects from this spray?

- 1 YES → ASK Q175
- 0 NO → GO TO Q176

*NOTE FOR TRAINING: PHRASE "STOP USING THESE SPRAYS" SHOULD BE BYPASSED IF Q172 = "EVERYDAY" OR IF Q173c A-C = NO.*

175. During this period, did you stop using the spray or reduce the amount you used because of side effects?

- 1 YES
- 0 NO

176. Were you ever issued protective equipment during [FILL MONTH] when handling the spray?

- 1 YES → ASK Q176A
- 0 NO → GO TO Q167r2

176A. Did you use this protective equipment during [FILL MONTH] when you handled the spray?

- 1 YES → ASK Q176B
- 0 NO → GO TO Q167r2

176B. How often did you use this protective equipment? [READ LIST]

- 1 Never,
- 2 Sometimes,
- 3 Usually, or
- 4 Always?

CATI: REPEAT Q167r – 176 FOR THE 2<sup>ND</sup> AND 3<sup>RD</sup> SPRAYS USED BY THE RESPONDENT.  
INTERVIEWERS, SAY: Now let's talk about the 2<sup>ND</sup> spray you used.

OTHERS, GO TO CATI CHECK BEFORE Q179.

167r2. Do you remember the name of the spray used in the hand-held sprayer / truck fogger / plane fogger during [FILL DATES]?

- 1 YES → ASK Q167bn
- 0 NO → GO TO Q168b

167bn. What is the name of the spray you used?

[ SEE PESTICIDE LIST – page 22 ]

IF NAME OF SPRAY(S) KNOWN, GO TO Q170b.

IF NAME OF SPRAY(S) UNKNOWN, CONTINUE TO Q168b.

168b. Did the spray used in the hand-held sprayer / truck fogger / plane fogger have a particular smell?

1 YES → ASK Q169b

0 NO → GO TO Q170b

169b. Did it smell like [READ LIST]?

01 Cooking oil,

02 Rotten eggs or sulfur,

03 Gasoline,

04 Kerosene,

05 Chemicals,

06 Insecticides,

07 Something sweet,

08 Something musty, or

09 Something else? → How would you describe this odor?

---

170b. Where did you get the spray? Was it . . . [READ LIST]?

(Enter 1 for All that Apply)

01 US military issued,

02 from the PX,

03 from the US (something you brought with you from the US, from a friend or relative in the US, etc.)

04 from fellow US soldiers,

05 from international soldiers or a local source (Allied / International Soldiers, local contractors, or other non-US source: Saudis, Turks, Bahraini, Egyptians, Syrians),

06 or from some other source? → DESCRIBE: \_\_\_\_\_

07 DON'T KNOW

171b. Where did you put the spray using the hand-held sprayer / truck fogger / plane fogger?

Did you spray it [READ APPROPRIATE CATEGORIES]?

CATI CHECK: IF Q18 = 3 OR 4 ONLY, SKIP OVER OPTION E BELOW.

YES NO

1 0 a. Over the camp? (ASK ONLY IF Q167w @p = 1 – plane fogging only)

1 0 b. On the ground inside your camp? (ASK b ONLY IF Q167w @t = 1)

1 0 c. Around the camp perimeter? (ASK c ONLY IF Q167w @t = 1)

[ ASK THE FOLLOWING ONLY IF Q167w @h = 1 – hand-held sprayer ]

1 0 d. In or around your sleeping quarters

1 0 e. In or around your mess hall or other designated eating area

1 0 f. In other areas where you ate (not counting mess halls  
and designated eating areas)

1 0 g. In or near your work areas

1 0 h. In or near your military vehicle

1 0 i. In or near your latrine

1 0 j. In other areas – Where?

172b. During [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A],  
how often did you spray using the [FILL 1) hand-held sprayer OR 2) plane/truck]?

[ ] EVERYDAY

OR

\_\_\_\_\_ # OF TIMES

PER: DAY  
WEEK  
MONTH

SOME OTHER PERIOD: \_\_\_\_\_

IF Q172b = EVERYDAY, SKIP TO Q174b.

173b. Did you stop using this spray during [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START  
TO END DATES IN Q11A] because [READ LIST]?

(Mark "1" Yes or "0" No for Each Item)

	<u>Yes</u>	<u>No</u>
a. pests stopped being a problem; because	1	0
b. you ran out of pesticides; or	1	0
c. for any other reason?	1	0

Describe: \_\_\_\_\_



174b. Did you experience any side effects from this spray from the hand-held sprayer / truck fogger / plane fogger?

- 1 YES → ASK Q175b
- 0 NO → GO TO Q176b

*NOTE FOR TRAINING: PHRASE "STOP USING THESE SPRAYS" SHOULD BE BYPASSED IF Q172b = "EVERYDAY" OR IF Q173b A-C = NO.*

175b. During this period, did you stop using the spray or reduce the amount you used because of side effects?

- 1 YES
- 0 NO

176b. Were you ever issued protective equipment during [FILL MONTH] when you handled the spray?

- 1 YES → ASK Q176bA
- 0 NO → GO TO Q167r3

176bA. Did you use this protective equipment during [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A] when you handled the spray used in the hand-held sprayer / truck fogger / plane fogger?

- 1 YES → ASK Q176bB
- 0 NO → GO TO Q167r3

176bB. How often did you use this protective equipment? [READ LIST]

- 1 Never,
- 2 Sometimes,
- 3 Usually, or
- 4 Always?

CATI: REPEAT Q167r – 176B FOR THE 3<sup>RD</sup> SPRAY USED BY THE RESPONDENT. INTERVIEWERS, SAY:  
Now let's talk about the 3<sup>RD</sup> spray you used.

OTHERS GO TO CATI CHECK BEFORE Q179.

167r3. Do you remember the name of the spray used in the hand-held sprayer / truck fogger / plane fogger during [FILL DATES]?

- 1 YES → ASK Q167bn
- 0 NO → GO TO Q168b

167cn. What is the name of the spray you used?

[ SEE PESTICIDE LIST – page 22 ]

IF NAME OF SPRAY(S) KNOWN, GO TO Q170c.

IF NAME OF SPRAY(S) UNKNOWN, CONTINUE TO Q168c.

168c. Did the spray used in the hand-held sprayer / truck fogger / plane fogger have a particular smell?

1 YES → ASK Q169c

0 NO → GO TO Q170c

169c. Did it smell like [READ LIST]?

01 Cooking oil,

02 Rotten eggs or sulfur,

03 Gasoline,

04 Kerosene,

05 Chemicals,

06 Insecticides,

07 Something sweet,

08 Something musty, or

09 Something else? → How would you describe this odor?

---

170c. Where did you get the spray used in the hand-held sprayer / truck fogger / plane fogger?

Was it . . . [READ LIST]?

(Enter 1 for All that Apply)

01 US military issued,

02 from the PX,

03 from the US (something you brought with you from the US, from a friend or relative in the US, etc.)

04 from fellow US soldiers,

05 from international soldiers or a local source (Allied / International Soldiers, local contractors, or other non-US source: Saudis, Turks, Bahraini, Egyptians, Syrians),

06 or from some other source? → DESCRIBE: \_\_\_\_\_

171c. Where did you put the spray using the hand-held sprayer / truck fogger / plane fogger?

Did you spray it [READ APPROPRIATE CATEGORIES]?

CATI CHECK: IF Q18 = 3 OR 4 ONLY, SKIP OVER OPTION E BELOW.

YES NO

1 0 a. Over the camp? (ASK ONLY IF Q167w @p = 1 – plane fogging only)

1 0 b. On the ground inside your camp? (ASK b ONLY IF Q167w @t = 1)

1 0 c. Around the camp perimeter? (ASK c ONLY IF Q167w @t = 1)

[ASK THE FOLLOWING ONLY IF Q167w @h = 1 – hand-held sprayer]

1 0 d. In or around your sleeping quarters

1 0 e. In or around your mess hall or other designated eating area

1 0 f. In other areas where you ate (not counting mess halls and designated eating areas)

1 0 g. In or near your work areas

1 0 h. In or near your military vehicle

1 0 i. In or near your latrine

1 0 j. In other areas – Where?

172c. During [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A], how often did you spray using the [FILL 1) hand-held sprayer OR 2) plane/truck]?

[ ] EVERYDAY

OR

\_\_\_\_\_ # OF TIMES

PER: DAY  
WEEK  
MONTH

SOME OTHER PERIOD: \_\_\_\_\_

IF Q172c = EVERYDAY, SKIP TO Q174c.

173c. Did you stop using this spray in the hand-held sprayer / truck fogger / plane fogger during [RANDOM MONTH, FIRST / LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A] because [READ LIST]?

(Mark "1" Yes or "0" No for Each Item)

	<u>Yes</u>	<u>No</u>
a. pests stopped being a problem; because	1	0
b. you ran out of pesticides; or	1	0
c. for any other reason?	1	0

Describe: \_\_\_\_\_

174c. Did you experience any side effects from this spray?

- 1 YES → ASK Q175c
- 0 NO → GO TO Q176c

*NOTE FOR TRAINING: PHRASE "STOP USING THESE SPRAYS" SHOULD BE BYPASSED IF Q172c = "EVERYDAY" OR IF Q173c A-C = NO.*

175c. During this period, did you stop using the spray in the hand-held sprayer / truck fogger / plane fogger or reduce the amount you used because of side effects?

- 1 YES
- 0 NO

176c. Were you ever issued protective equipment during [FILL MONTH] when you handled this spray?

- 1 YES → ASK Q176cA
- 0 NO → GO TO Q179

176cA. Did you use this protective equipment during [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A] when you handled the spray used in the hand-held sprayer / truck fogger / plane fogger?

- 1 YES → ASK Q176cB
- 0 NO → GO TO Q179

176cB. How often did you use this protective equipment? [READ LIST]

- 1 Never,
- 2 Sometimes,
- 3 Usually, or
- 4 Always?

{ 179-184 IN PROGRESS }

SPRAYS USED BY OTHERS

CATI CHECK: CONTINUE WITH Q179 ONLY IF SOMEONE ELSE USED SPRAY (Q167 = 2.

179. You mentioned that someone else used a hand-held sprayer / truck fogger / plane fogger during this time. Do you know who did this? Was it [READ LIST]...?

(Mark "1" Yes or "0" No for Each Item)

- 01 U.S. military troops,
- 02 Non-U.S. military troops (Allied / International soldiers),

03 A local non-military source (such as local contractors), or

04 Someone else? – Who?: \_\_\_\_\_

179w. Which did they use: hand-held sprayer, truck fogger, or plane fogger?

(Enter 1 for All that Apply)

1 A hand-held sprayer,

2 a truck fogger,

3 a plane fogger.

179r. Do you know the name(s) of the spray(s) used by others in the hand-held sprayer / truck fogger / plane fogger?

1 YES → ASK Q179n

0 NO → GO TO Q180

179n. What is the name of the spray they used?

[ SEE PESTICIDE LIST – page 22 ]

179b. [IF Q179n @1 = d or 98 GO TO Q180]

[IF Q179n @1 ≥ 1 AND Q179n @1 < 98 GO TO Q181]

IF NAME OF SPRAY(S) KNOWN, GO TO Q181

IF NAME OF SPRAY(S) UNKNOWN, CONTINUE WITH Q180

180. Did the spray from the hand-held sprayer / truck fogger / plane fogger have a particular smell?

1 YES → ASK Q180A

0 NO → GO TO Q181

180A. Did it smell like [READ LIST]?

01 Cooking oil,

02 Rotten eggs or sulfur,

03 Gasoline,

04 Kerosene,

05 Chemicals,

06 Insecticides,

07 Something sweet,

08 Something musty, or

09 Something else? → How would you describe this odor?

181. Where did they spray using the hand-held sprayer / truck fogger / plane fogger?

Did they put it [READ APPROPRIATE CATEGORIES]?

CATI CHECK: IF Q18 = 3 OR 4 ONLY, SKIP OVER OPTION E BELOW.

YES NO

1 0 a. Over the camp? (ASK ONLY IF Q179w @p = 1 – plane fogging only)

1 0 b. On the ground inside your camp? (ASK b ONLY IF Q179w @t = 1)

1 0 c. Around the camp perimeter? (ASK c ONLY IF Q179w @t = 1)

[ ASK THE FOLLOWING ONLY IF Q179w @h = 1 – hand-held sprayer ]

1 0 d. In or around your sleeping quarters

1 0 e. In or around your mess hall or other designated eating area

1 0 f. In other areas where you ate (not counting mess halls  
and designated eating areas)

1 0 g. In or near your work areas

1 0 h. In or near your military vehicle

1 0 i. In or near your latrine

1 0 j. In other areas – Where?

182. During [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A],  
how often did you see this hand-held spraying / truck fogging / plane fogging?

[ ] EVERYDAY

OR

\_\_\_\_\_ # OF TIMES

PER: DAY  
WEEK  
MONTH

SOME OTHER PERIOD: \_\_\_\_\_

183. Did you experience any side effects from the spray used in the hand-held sprayer / truck fogger / plane fogger?

1 YES

0 NO

REPEAT Q179r – 183 FOR THE 2<sup>ND</sup> AND 3<sup>RD</sup> SPRAY USED BY OTHERS.

179r2. Do you know the name(s) of the spray(s) used by others in the hand-held sprayer / truck fogger / plane fogger?

- 1 YES → ASK Q179bn
- 0 NO → GO TO Q180b

179bn. What is the name of the spray they used?

[ SEE PESTICIDE LIST – page 22 ]

179bb. [IF Q179n @1 = d or 98 GO TO Q180b]

[IF Q179n @1 ≥ 1 AND Q179n @1 < 98 GO TO Q181b]

IF NAME OF SPRAY(S) KNOWN, GO TO Q181b

IF NAME OF SPRAY(S) UNKNOWN, CONTINUE WITH Q180b

180b. Did the spray from the hand-held sprayer / truck fogger / plane fogger have a particular smell?

- 1 YES → ASK Q180bA
- 0 NO → GO TO Q181b

180bA. Did it smell like [READ LIST]?

- 01 Cooking oil,
  - 02 Rotten eggs or sulfur,
  - 03 Gasoline,
  - 04 Kerosene,
  - 05 Chemicals,
  - 06 Insecticides,
  - 07 Something sweet,
  - 08 Something musty, or
  - 09 Something else? → How would you describe this odor?
-

181b. Where did they spray using the hand-held sprayer / truck fogger / plane fogger?

Did they put it [READ APPROPRIATE CATEGORIES]?

CATI CHECK: IF Q18 = 3 OR 4 ONLY, SKIP OVER OPTION E BELOW.

YES NO

1 0 a. Over the camp? (ASK ONLY IF Q179w @p = 1 – plane fogging only)

1 0 b. On the ground inside your camp? (ASK b ONLY IF Q179w @t = 1)

1 0 c. Around the camp perimeter? (ASK c ONLY IF Q179w @t = 1)

[ASK THE FOLLOWING ONLY IF Q179w @h = 1 – hand-held sprayer]

1 0 d. In or around your sleeping quarters

1 0 e. In or around your mess hall or other designated eating area

1 0 f. In other areas where you ate (not counting mess halls  
and designated eating areas)

1 0 g. In or near your work areas

1 0 h. In or near your military vehicle

1 0 i. In or near your latrine

1 0 j. In other areas – Where?

182b. During [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A],  
how often did you see this hand-held spraying / truck fogging / plane fogging?

[ ] EVERYDAY

OR

\_\_\_\_\_ # OF TIMES

PER: DAY  
WEEK  
MONTH

SOME OTHER PERIOD: \_\_\_\_\_

183b. Did you experience any side effects from the spray used in the hand-held sprayer / truck fogger / plane fogger?

1 YES

0 NO

REPEAT Q179r – 183 FOR THE 3<sup>RD</sup> SPRAY USED BY OTHERS.



179r3. Do you know the name(s) of the spray(s) used by others in the hand-held sprayer / truck fogger / plane fogger?

1 YES → ASK Q179cn

0 NO → GO TO Q180c

179cn. What is the name of the spray they used?

[ SEE PESTICIDE LIST – page 22 ]

179cb. [IF Q179n @1 = d or 98 GO TO Q180c]

[IF Q179n @1 ≥ 1 AND Q179n @1 < 98 GO TO Q181c]

IF NAME OF SPRAY(S) KNOWN, GO TO Q181c

IF NAME OF SPRAY(S) UNKNOWN, CONTINUE WITH Q180c

180c. Did the spray from the hand-held sprayer / truck fogger / plane fogger have a particular smell?

1 YES → ASK Q180cA

0 NO → GO TO Q181c

180cA. Did it smell like [READ LIST]?

01 Cooking oil,

02 Rotten eggs or sulfur,

03 Gasoline,

04 Kerosene,

05 Chemicals,

06 Insecticides,

07 Something sweet,

08 Something musty, or

09 Something else? → How would you describe this odor?

---

181c. Where did they spray using the hand-held sprayer / truck fogger / plane fogger?

Did they put it [READ APPROPRIATE CATEGORIES]?

CATI CHECK: IF Q18 = 3 OR 4 ONLY, SKIP OVER OPTION E BELOW.

YES NO

- 1 0 a. Over the camp? (ASK ONLY IF Q179w @p = 1 – plane fogging only)
- 1 0 b. On the ground inside your camp? (ASK b ONLY IF Q179w @t = 1)
- 1 0 c. Around the camp perimeter? (ASK c ONLY IF Q179w @t = 1)

[ ASK THE FOLLOWING ONLY IF Q179w @h = 1 – hand-held sprayer ]

- 1 0 d. In or around your sleeping quarters
- 1 0 e. In or around your mess hall or other designated eating area
- 1 0 f. In other areas where you ate (not counting mess halls  
and designated eating areas)
- 1 0 g. In or near your work areas
- 1 0 h. In or near your military vehicle
- 1 0 i. In or near your latrine
- 1 0 j. In other areas – Where?

182c. During [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A],  
how often did you see this hand-held spraying / truck fogging / plane fogging?

[ ] EVERYDAY

OR

\_\_\_\_\_ # OF TIMES

PER: DAY

WEEK

MONTH

SOME OTHER PERIOD: \_\_\_\_\_

183c. Did you experience any side effects from the spray used in the hand-held sprayer / truck fogger / plane fogger?

- 1 YES
- 0 NO

CATI CHECK Q94f-h:

IF Q94f = YES, CONTINUE WITH Q185.

IF Q94g = NO, BUT R OR OTHERS USED LIQUIDS, GO TO Q190

IF Q94h = NO, BUT R OR OTHERS USED OTHER PESTICIDES, GO TO Q210

PERSONAL USE OF NO-PEST STRIPS BY R OR OTHERS

185. You mentioned that you or someone else used "No-Pest Strips" to kill or control pests during [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A]. Did you personally hang the "No-Pest strips" or did someone else do this?

- 1 SELF
- 2 SOMEONE ELSE
- 3 BOTH

"NO-PEST STRIPS" USED BY RESPONDENT

186. During [MONTH], were No-Pest strips hung [READ LIST]?  
CATI CHECK: IF Q18 = 3 OR 4 ONLY, SKIP OVER OPTION B BELOW.  
(Mark "1" Yes or "0" No for Each Item)

YES NO

- |   |   |   |
|---|---|---|
| 1 | 0 | a. In your sleeping quarters  |
| 1 | 0 | b. In your mess hall / designated eating area   |
| 1 | 0 | c. In <u>other</u> areas where you ate (not counting mess halls<br>& designated eating areas) |
| 1 | 0 | d. In or near your work areas   |
| 1 | 0 | e. In or near your military vehicle   |
| 1 | 0 | f. In or near your latrine  |
| 1 | 0 | g. In other areas – Where?  |

186w. Where did the No-Pest Strips come from? Were they . . . [READ LIST]?

- 01 US military issued,
- 02 from the PX,
- 03 from the US (something you brought with you from the US, from a friend or relative in the US, etc.)
- 04 from fellow US soldiers,
- 05 from international soldiers or a local source (Allied / International Soldiers, local contractors, or other non-military source: Saudis, Turks, Bahraini, Egyptians, Syrians),
- 06 or from some other source? → DESCRIBE: \_\_\_\_\_
- 07 DON'T KNOW

186a. [IF Q17 = 2 ASK]

What was the size of this tent? Would you describe its size as approximately that of a GP large tent (900ft<sup>2</sup>), a GP medium tent (512ft<sup>2</sup>), a GP small tent (227ft<sup>2</sup>), or as a tent of some other size? (Your best guess or estimate is fine.)

- 1 GP LARGE TENT (30 x 30 ft)
- 2 GP MEDIUM TENT (20 x 25 ft)
- 3 GP SMALL TENT (15 x 15 ft)
- 4 SOME OTHER DIMENSION – SPECIFY

[ALL OTHERS ASK]

Would you say that for every 10 by 10 foot area of floor space there was more than one No-Pest Strips hung, or less than one No-Pest Strips hung? (Your best guess or estimate is fine.)

- 1 MORE THAN 1
- 2 LESS THAN 1
- 3 ABOUT 1 → GO TO Q186b

186a2. [IF Q17 = 2 ASK]

Approximately how many No-Pest Strips in total were hung in this tent at any one time during [FILL DATES]

[ALL OTHERS ASK]

Approximately how many No-Pest Strips would you estimate were hung for every 10 by 10 foot area of floor space in [FILL DATES]

1 – 99 \_\_\_\_\_

186b. [IF Q18A = 2 OR Q18A2 = 2 ASK]

What was the size of this tent? Would you describe its size as approximately that of a GP large tent (900ft<sup>2</sup>), a GP medium tent (512ft<sup>2</sup>), a GP small tent (227ft<sup>2</sup>), or as a tent of some other size? (Your best guess or estimate is fine.)

- 1 GP LARGE TENT (30 x 30 ft)
- 2 GP MEDIUM TENT (20 x 25 ft)
- 3 GP SMALL TENT (15 x 15 ft)
- 4 SOME OTHER DIMENSION – SPECIFY

[ALL OTHERS ASK]

Would you say that for every 10 by 10 foot area of floor space there was more than one No-Pest Strips hung, or less than one No-Pest Strips hung? (Your best guess or estimate is fine.)

- 1 MORE THAN 1
- 2 LESS THAN 1
- 3 ABOUT 1 → GO TO Q186c

Q186b2 [IF Q18 = 2 or Q18A2 = 2]

Approximately how many No-Pest strips in total were hung in this tent at any one time during [FILL DATES]

[ALL OTHERS ASK]

Approximately how many No-Pest strips would you estimate were hung for every 10 by 10 foot area of floor space in your (mess hall/designated eating area) during [FILL DATES]

186c. You mentioned that No-Pest Strips were hung in other areas where you ate (not counting mess halls and designated eating areas).

[IF Q18E @2 = 1 OR Q19 @2 = 1 ASK]

What was the size of this tent?

Would you describe its size as approximately that of a GP large tent (900ft<sup>2</sup>), a GP medium tent (512ft<sup>2</sup>), a GP small tent (227ft<sup>2</sup>), or as a tent of some other dimension? (Your best guess or estimate is fine.)

- 1 GP LARGE TENT (30 x 30 ft)
- 2 GP MEDIUM TENT (20 x 25 ft)
- 3 GP SMALL TENT (15 x 15 ft)
- 4 SOME OTHER DIMENSION – SPECIFY

[ALL OTHERS ASK]

Would you say that for every 10 by 10 foot area of floor space there was more than one No-Pest Strips hung, or less than one No-Pest Strip hung? (Your best guess or estimate is fine.)

- 1 MORE THAN 1
- 2 LESS THAN 1
- 3 ABOUT 1 → GO TO Q186d

186c2. [IF Q18E @2 = 1 OR Q19 @2 = 1 ASK]

Approximately how many No-Pest Strips in total were hung in this tent at any one time during [FILL MONTH]

[ALL OTHERS ASK]

Approximately how many No-Pest Strips would you estimate were hung for every 10 by 10 foot area of floor space in other areas where you ate (not counting mess halls / designated eating areas) during [FILL DATES]

1 - 99 \_\_\_\_\_

186d. You mentioned that No-Pest Strips were hung in or near your work areas.

[IF Q20E @2 = 1 OR Q19 @2 = 1 ASK]

What was the size of this tent?

Would you describe its size as approximately that of a GP large tent (900ft<sup>2</sup>), a GP medium tent (512ft<sup>2</sup>), a GP small tent (227ft<sup>2</sup>), or as a tent of some other size? (Your best guess or estimate is fine.)

- 1 GP LARGE TENT (30 x 30 ft)
- 2 GP MEDIUM TENT (20 x 25 ft)
- 3 GP SMALL TENT (15 x 15 ft)
- 4 SOME OTHER DIMENSION - SPECIFY

[ALL OTHERS - IF Q20 @1 = 1 ASK]

Would you say that for every 10 by 10 foot area of floor space there was more than one No-Pest Strips hung, or less than one No-Pest Strip hung? (Your best guess or estimate is fine.)

- 1 MORE THAN 1
- 2 LESS THAN 1
- 3 ABOUT 1 → GO TO Q186e

186d2. [IF Q20E @2 = 20 ASK]

Approximately how many No-Pest Strips in total were hung in this tent at any one time during [FILL DATES]

[ELSE]

Approximately how many No-Pest Strips would you estimate were hung for every 10 by 10 foot area of floor space in other areas where you ate (not counting mess halls / designated eating areas) during [FILL DATES]

1 – 99 \_\_\_\_\_

186e. You mentioned that No-Pest Strips were hung in or near your military vehicle.

Were they hung in an enclosed area of the vehicle, such as the interior of the cab, or were they hung in an area of the vehicle that was open to the outside?

- 1 Enclosed
- 2 Open
- 3 Both

186e2. How many No-Pest Strips were hung in this vehicle at any one time during [FILL DATES]

1 – 99 \_\_\_\_\_

186f. You mentioned that No-Pest Strips were hung in or near your latrine.

Would you say that for every 10 by 10 foot area of floor space there was more than one No-Pest Strips hung, or less than one No-Pest Strip hung? (Your best guess or estimate is fine.)

- 1 MORE THAN 1
- 2 LESS THAN 1
- 3 ABOUT 1 → GO TO Q186g

186f2. How many No-Pest Strips were hung in the latrine at any one time during [FILL DATES]

1 – 99 \_\_\_\_\_

186g. You mentioned that No-Pest Strips were hung in other areas.

Would you say that for every 10 by 10 foot area of floor space there was more than one No-Pest Strips hung, or less than one No-Pest Strip hung? (Your best guess or estimate is fine.)

- 1 MORE THAN 1
- 2 LESS THAN 1
- 3 ABOUT 1 → GO TO Q187

186g2. How many No-Pest Strips were hung in the latrine at any one time during [FILL MONTH]

1 - 99 \_\_\_\_\_

187. During [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A], how often did you personally use or see No-Pest strips?

[ ] EVERYDAY

OR

\_\_\_\_\_ # TIMES

PER: DAY  
WEEK  
MONTH

OTHER PERIOD: \_\_\_\_\_

CATI CHECK Q94g:

R OR OTHERS USED LIQUIDS (Q94g = YES), CONTINUE WITH Q190.

R OR OTHERS DID NOT USE LIQUIDS (Q94g = NO) BUT USED OTHER PESTICIDES (GO TO Q210)

#### FIELD USE OF LIQUIDS

190. You mentioned that you or someone else used liquids around the places where you slept, ate, or worked during [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A] to kill or control pests.

Did you personally use them or did someone else?

- 1 SELF (CONTINUE WITH Q191)
- 2 SOMEONE ELSE (GO TO Q202)
- 3 BOTH → GO TO 190u



190u. Were you and the others using the same type of liquids, or different types?

- 1 DIFFERENT → First, I'd like to ask you about the liquids you personally used.  
Then we can talk about what others did.  
GO TO Q191
- 2 SAME → ASK Q190o, THEN GO TO Q191
- 3 SAME & DIFFERENT → First, I'd like to talk about the liquid you used along with any usage by others of (this / these) same liquids. Then I'll ask about any liquids that others used that you did not.

190o. Who were the others that were using these liquids besides you? Was it . . .

[READ LIST]?

(Mark "1" Yes or "0" No for Each Item)

- 01 U.S. military troops,
- 02 Non-U.S. military troops (Allied / International soldiers),
- 03 A local non-military source (such as local contractors), or
- 04 Someone else? – Who?: \_\_\_\_\_

191. How many different liquids did you (and the others) use at that time?

- 1 1
- 2 2
- 3 3
- 4 4 OR MORE

CATI CHECK: IF 191 = 1, GO TO Q190r.

Q191i. Can you remember your usage of these liquids individually, or did you use these liquids so interchangeably during [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A] that in thinking back you can't tell them apart?

- 1 REMEMBER INDIVIDUALLY
- 0 USED ALL INTERCHANGEABLY
- 2 SOME INDIVIDUALLY / SOME INTERCHANGEABLY

190r. Do you remember the name of the liquids you used in [FILL MONTH]?

- 1 YES → ASK 190n
- 0 NO → GO TO 190a

190n. What is the name of each liquid you (and the others) used?

[ SEE PESTICIDE LIST – page 22 ]

190a. [IF Q190i = 1 AND Q191 ≥ 2 ASK]

I'd like to ask you about each of these liquids separately.

[ELSE] [IF Q190i = 0 AND Q191 ≥ 2 ASK]

I'd like to ask you about your usage of these liquids.

[IF Q190i = 2 AND Q191 ≥ 2 ASK]

I'd like to ask you about the one you used separately. Then I'll ask about the other liquid you used.

[IF Q191 = 1 ASK]

I'd like to ask you about this liquid.

190b. [IF Q190n @1 = d GO TO Q192]

[IF Q190n @1 ≥ 1 AND Q190n @1 < 98 GO TO Q190p]

RESPONDENT USE OF LIQUIDS (Q192 – Q258)

192. Did (this / these) liquid(s) have a particular smell?

- 1 YES → ASK Q193
- 0 NO → GO TO Q194

193. Did it smell like [READ LIST]?

- 01 Cooking oil,
  - 02 Rotten eggs or sulfur,
  - 03 Gasoline,
  - 04 Kerosene,
  - 05 Chemicals,
  - 06 Insecticides,
  - 07 Something sweet,
  - 08 Something musty, or
  - 09 Something else? → How would you describe this odor?
- 

194. What color (was this / were these) liquid(s)?

- 01 COLORLESS / CLEAR
- 02 DARK BROWN
- 03 LIGHT BROWN
- 04 GREY
- 05 ORANGE
- 06 RED
- 07 WHITE
- 08 OPAQUE / CLOUDY / MILKY
- 09 YELLOW
- 10 OTHER → DESCRIBE: \_\_\_\_\_
- 11 MORE THAN 1 COLOR (USE FOR GROUPS)

195. Where did you (and the others) get this liquid? Was it . . . [READ LIST]?

- 01 US military issued,
- 02 from the PX,
- 03 from the US (something you brought with you from the US, from a friend or relative in the US, etc.)
- 04 from fellow US soldiers,

- 05 from international soldiers or a local source (Allied / International Soldiers,  
local contractors, or other non-US source: Saudis, Turks, Bahraini, Egyptians, Syrians),
- 06 or from some other source? → DESCRIBE: \_\_\_\_\_
- 07 DON'T KNOW

196. Where did you (and the others) put this liquid? Did you put it . . . [READ LIST]?  
(Mark YES or NO for Each Item)  
[ ] IN ALL OF THE SAME LOCATIONS AS R → GO TO Q197

CATI CHECK: IF Q18 = 3 OR 4 ONLY, SKIP OVER OPTIONS C & D BELOW.

YES NO

- |   |   |   |
|---|---|---|
| 1 | 0 | a. In or near your bednetting, blankets, or sleeping bags                                     |
| 1 | 0 | b. In or around your sleeping quarters  |
| 1 | 0 | c. On the floor in your mess hall / designated eating area                                    |
| 1 | 0 | d. On the table in your mess hall / designated eating area                                    |
| 1 | 0 | e. In <u>other</u> areas where you ate (not counting mess halls /<br>designated eating areas) |
| 1 | 0 | f. In or near your work areas   |
| 1 | 0 | g. In or near your military vehicle   |
| 1 | 0 | h. In or near your latrine  |
| 1 | 0 | i. In other areas – Where?  |

197. During [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A],  
how often did you use these liquids?

[ ] EVERYDAY

OR

\_\_\_\_\_ # OF TIMES

PER: DAY

WEEK

MONTH

SOME OTHER PERIOD: \_\_\_\_\_

ASK Q197A ONLY IF Q190 = 3 AND Q190u = 2.

197A. During [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A],  
how often did you see others use these liquids?

[ ] EVERYDAY

OR

\_\_\_\_\_ # TIMES

PER:

DAY

WEEK

MONTH

OTHER PERIOD: \_\_\_\_\_

198. During [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A],  
did you (or others) dispose of the old liquids?

YES → GO TO 198A

NO → GO TO 199

198A. How did you (or others) dispose of (it / them)?  
(Mark "1" Yes or "0" No for Each Item)

1 DUMPED IN OUTSIDE TRASH CONTAINER

2 DUMPED IN INSIDE TRASH CONTAINER

3 DIDN'T HAVE TO DUMP IT BECAUSE WIND WOULD BLOW IT AWAY

4 OTHER – DESCRIBE \_\_\_\_\_

IF Q197 = EVERYDAY, GO TO Q200

199. Did you personally stop using this liquid during [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR,  
OR START TO END DATES IN Q11A] because [READ LIST]?

(Mark "1" Yes or "0" No for Each Item)

	<u>Yes</u>	<u>No</u>
a. pests stopped being a problem; because	1	0
b. you ran out of pesticides; or	1	0
c. for any other reason?	1	0

Describe: \_\_\_\_\_

200. Did you experience any side effects from this/these liquid(s)?

- 1 YES → ASK Q200A
- 0 NO → GO TO Q201

*NOTE FOR TRAINING: PHRASE "STOP USING THESE LIQUIDS" SHOULD BE BYPASSED IF Q197 = "EVERYDAY" OR IF Q199 a-c = NO.*

200A. During this period, did you stop using (this / these) liquid(s) or reduce the amount you used because of side effects?

- 1 YES
- 0 NO

201. Were you ever issued any protective equipment during [FILL MONTH] when you handled (this / these) liquids?

- 1 YES → ASK Q201A
- 0 NO → GO TO NEXT CATI CHECK

201A. Did you use this protective equipment during [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A] when you handled (this /these) liquids?

- 1 YES → ASK Q201B
- 0 NO → GO TO NEXT CATI CHECK

201B. How often did you use this protective equipment? [READ LIST]

- 1 Never,
- 2 Sometimes,
- 3 Usually, or
- 4 Always?

CATI: REPEAT Q192 – 201B FOR THE 2<sup>ND</sup> AND 3<sup>RD</sup> LIQUIDS USED BY THE RESPONDENT.  
INTERVIEWERS, SAY: Now let's talk about the (2<sup>ND</sup> / 3<sup>RD</sup>) liquid you used.

OTHERS GO TO Q210.

192b. Did (this / these) liquid(s) have a particular smell?

- 1 YES → ASK Q193b
- 0 NO → GO TO Q194b

193b. Did it smell like [READ LIST]?

- 01 Cooking oil,
- 02 Rotten eggs or sulfur,
- 03 Gasoline,
- 04 Kerosene,
- 05 Chemicals,
- 06 Insecticides,
- 07 Something sweet,
- 08 Something musty, or
- 09 Something else? → How would you describe this odor?

194b. What color (was this / were these) liquid(s)?

- 01 COLORLESS / CLEAR
- 02 DARK BROWN
- 03 LIGHT BROWN
- 04 GREY
- 05 ORANGE
- 06 RED
- 07 WHITE
- 08 OPAQUE / CLOUDY / MILKY
- 09 YELLOW
- 10 OTHER → DESCRIBE: \_\_\_\_\_
- 11 MORE THAN 1 COLOR (USE FOR GROUPS)

195b. Where did you (and the others) get this liquid? Was it . . . [READ LIST]?

- 01 US military issued,
- 02 from the PX,
- 03 from the US (something you brought with you from the US, from a friend or relative in the US, etc.)
- 04 from fellow US soldiers,
- 05 from international soldiers or a local source (Allied / International Soldiers, local contractors, or other non-US source: Saudis, Turks, Bahraini, Egyptians, Syrians),
- 06 or from some other source? → DESCRIBE: \_\_\_\_\_
- 07 DON'T KNOW

196b. Where did you (and the others) put this liquid? Did you put it . . . [READ LIST]?

(Mark YES or NO for Each Item)

[ ] IN ALL OF THE SAME LOCATIONS AS R → GO TO Q197b

CATI CHECK: IF Q18 = 3 OR 4 ONLY, SKIP OVER OPTIONS C & D BELOW.

YES NO

- |   |   |  |
|---|---|--|
| 1 | 0 | a. In or near your bednetting, blankets, or sleeping bags                                  |
| 1 | 0 | b. In or around your sleeping quarters   |
| 1 | 0 | c. On the floor in your mess hall / designated eating area                                 |
| 1 | 0 | d. On the table in your mess hall / designated eating area                                 |
| 1 | 0 | e. In <u>other</u> areas where you ate (not counting mess halls / designated eating areas) |
| 1 | 0 | f. In or near your work areas  |
| 1 | 0 | g. In or near your military vehicle  |
| 1 | 0 | h. In or near your latrine   |
| 1 | 0 | i. In other areas – Where?   |



197b. During [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A],  
how often did you use these liquids?

☐ EVERYDAY

OR

\_\_\_\_\_ # OF TIMES

PER: DAY

WEEK

MONTH

SOME OTHER PERIOD: \_\_\_\_\_

ASK Q197Ab ONLY IF Q190 = 3 AND Q190u = 2.

197Ab. During [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A],  
how often did you see others use these liquids?

☐ EVERYDAY

OR

\_\_\_\_\_ # TIMES

PER:

DAY

WEEK

MONTH

OTHER PERIOD: \_\_\_\_\_

198b. During [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A],  
did you (or others) dispose of the old liquids?

YES → GO TO 198Ab

NO → GO TO 199b

198Ab. How did you (or others) dispose of (it / them)?  
(Mark "1" Yes or "0" No for Each Item)

- 1 DUMPED IN OUTSIDE TRASH CONTAINER
- 2 DUMPED IN INSIDE TRASH CONTAINER
- 3 DIDN'T HAVE TO DUMP IT BECAUSE WIND WOULD BLOW IT AWAY
- 4 OTHER - DESCRIBE \_\_\_\_\_

IF Q197Ab = EVERYDAY, GO TO Q200b

199b. Did you personally stop using this liquid during [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A] because [READ LIST]?

(Mark "1" Yes or "0" No for Each Item)

	<u>Yes</u>	<u>No</u>
a. pests stopped being a problem; because	1	0
b. you ran out of pesticides; or	1	0
c. for any other reason?	1	0

Describe: \_\_\_\_\_

200b. Did you experience any side effects from this/these liquid(s)?

- 1 YES → ASK Q200Ab
- 0 NO → GO TO Q201b

*NOTE FOR TRAINING: PHRASE "STOP USING THESE LIQUIDS" SHOULD BE BYPASSED IF Q197b = "EVERYDAY" OR IF Q199b a-c = NO.*

200Ab. During this period, did you stop using (this / these) liquid(s) or reduce the amount you used because of side effects?

- 1 YES
- 0 NO

201b. Were you ever issued any protective equipment during [FILL MONTH] when you handled (this / these) liquids?

- 1 YES → ASK Q201Ab
- 0 NO → GO TO NEXT CATI CHECK

201Ab. Did you use this protective equipment during [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A] when you handled (this /these) liquids?

- 1 YES → ASK Q201B
- 0 NO → GO TO NEXT CATI CHECK

201Bb. How often did you use this protective equipment? [READ LIST]

- 1 Never,
- 2 Sometimes,
- 3 Usually, or
- 4 Always?

CATI: REPEAT Q192 – 201B FOR THE 3<sup>RD</sup> LIQUID USED BY THE RESPONDENT. INTERVIEWERS, SAY:  
Now let's talk about the 3<sup>RD</sup> liquid you used.

OTHERS GO TO Q210.

192c. Did (this / these) liquid(s) have a particular smell?

- 1 YES → ASK Q193c
- 0 NO → GO TO Q194c

193c. Did it smell like [READ LIST]?

- 01 Cooking oil,
- 02 Rotten eggs or sulfur,
- 03 Gasoline,
- 04 Kerosene,
- 05 Chemicals,
- 06 Insecticides,
- 07 Something sweet,
- 08 Something musty, or
- 09 Something else? → How would you describe this odor?

194c. What color (was this / were these) liquid(s)?

- 01 COLORLESS / CLEAR
- 02 DARK BROWN
- 03 LIGHT BROWN
- 04 GREY
- 05 ORANGE
- 06 RED
- 07 WHITE
- 08 OPAQUE / CLOUDY / MILKY
- 09 YELLOW
- 10 OTHER → DESCRIBE: \_\_\_\_\_
- 11 MORE THAN 1 COLOR (USE FOR GROUPS)

195c. Where did you (and the others) get this liquid? Was it . . . [READ LIST]?

- 01 US military issued,
- 02 from the PX,
- 03 from the US (something you brought with you from the US, from a friend or relative in the US, etc.)
- 04 from fellow US soldiers,
- 05 from international soldiers or a local source (Allied / International Soldiers, local contractors, or other non-US source: Saudis, Turks, Bahraini, Egyptians, Syrians),
- 06 or from some other source? → DESCRIBE: \_\_\_\_\_
- 07 DON'T KNOW

196c. Where did you (and the others) put this liquid? Did you put it . . . [READ LIST]?

(Mark YES or NO for Each Item)

[ ] IN ALL OF THE SAME LOCATIONS AS R → GO TO Q197c

CATI CHECK: IF Q18 = 3 OR 4 ONLY, SKIP OVER OPTIONS C & D BELOW.

YES NO

- |   |   |  |
|---|---|--|
| 1 | 0 | a. In or near your bednetting, blankets, or sleeping bags  |
| 1 | 0 | b. In or around your sleeping quarters                     |
| 1 | 0 | c. On the floor in your mess hall / designated eating area |
| 1 | 0 | d. On the table in your mess hall / designated eating area |

- 1     0     e. In other areas where you ate (not counting mess halls /  
designated eating areas)
- 1     0     f. In or near your work areas
- 1     0     g. In or near your military vehicle
- 1     0     h. In or near your latrine
- 1     0     i. In other areas – Where?

197c. During [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A],  
how often did you use these liquids?

[ ] EVERYDAY

OR

\_\_\_\_\_ # OF TIMES                      PER:    DAY  
   WEEK  
   MONTH  
   SOME OTHER PERIOD: \_\_\_\_\_

ASK Q197Ac ONLY IF Q190 = 3 AND Q190u = 2.

197Ac. During [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A],  
how often did you see others use these liquids?

[ ] EVERYDAY

OR

\_\_\_\_\_ # TIMES                      PER:    DAY  
   WEEK  
   MONTH  
   OTHER PERIOD: \_\_\_\_\_

198c. During [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A],  
did you (or others) dispose of the old liquids?

YES → GO TO 198Ac

NO → GO TO 199c

198Ac. How did you (or others) dispose of (it / them)?

(Mark "1" Yes or "0" No for Each Item)

- 1 DUMPED IN OUTSIDE TRASH CONTAINER
- 2 DUMPED IN INSIDE TRASH CONTAINER
- 3 DIDN'T HAVE TO DUMP IT BECAUSE WIND WOULD BLOW IT AWAY
- 4 OTHER - DESCRIBE \_\_\_\_\_

IF Q197Ac = EVERYDAY, GO TO Q200c

199c. Did you personally stop using this liquid during [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A] because [READ LIST]?

(Mark "1" Yes or "0" No for Each Item)

	<u>Yes</u>	<u>No</u>
a. pests stopped being a problem; because	1	0
b. you ran out of pesticides; or	1	0
c. for any other reason?	1	0

Describe: \_\_\_\_\_

200c. Did you experience any side effects from this/these liquid(s)?

- 1 YES → ASK Q200Ac
- 0 NO → GO TO Q201c

*NOTE FOR TRAINING: PHRASE "STOP USING THESE LIQUIDS" SHOULD BE BYPASSED IF Q197c = "EVERYDAY" OR IF Q199c a-c = NO.*

200Ac. During this period, did you stop using (this / these) liquid(s) or reduce the amount you used because of side effects?

- 1 YES
- 0 NO

201c. Were you ever issued any protective equipment during [FILL MONTH] when you handled (this / these) liquids?

- 1 YES → ASK Q201Ac
- 0 NO → GO TO NEXT CATI CHECK

201Ac. Did you use this protective equipment during [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A] when you handled (this /these) liquids?

- 1 YES → ASK Q201Bc
- 0 NO → GO TO NEXT CATI CHECK

201Bc. How often did you use this protective equipment? [READ LIST]

- 1 Never,
- 2 Sometimes,
- 3 Usually, or
- 4 Always?

LIQUIDS USED BY OTHERS

CATI CHECK: CONTINUE WITH Q202 ONLY IF SOMEONE ELSE SET OUT THE LIQUIDS (Q190 = 2 OR Q190 = 3 (BOTH & DIFFERENT))

202. You mentioned that someone else used liquids at that time. Do you know who did this?  
Were they . . . [READ LIST]?

(Mark "1" Yes or "0" No for Each Item)

- 01 U.S. military troops,
- 02 Non-U.S. military troops (Allied / International soldiers),
- 03 A local non-military source (such as local contractors), or
- 04 Someone else? – Who?: \_\_\_\_\_

203. To your knowledge, how many different types of liquids were used by other people during that time?

- 1 1 → GO TO Q202r
- 2 2
- 3 3
- 4 4 OR MORE

202i. IF ANSWER TO Q203 > 1, ASK: Can you remember others' usage of these liquids individually, or did they use these liquids so interchangeably during [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A] that in thinking back you can't tell them apart?

- 1 REMEMBER INDIVIDUALLY
- 0 USED ALL INTERCHANGEABLY
- 2 SOME INDIVIDUALLY / SOME INTERCHANGEABLY

202r. Do you know the name(s) of the liquid(s) that (was / were) used by others?

- 1 YES → ASK Q202n
- 0 NO → GO TO Q204

202n. What is the name of each liquid they used?

[ SEE PESTICIDE LIST – page 22 ]

202intro. [IF Q202i = 1 AND Q203 ≥ 2 ASK]  
I'd like to ask you about each of these liquids separately.

[IF Q202i = 0 AND Q203 ≥ 2 ASK]  
I'd like to ask you about their use of these liquids.

[IF Q203 = 1 ASK]  
I'd like to ask you about this liquid.

202b. [IF Q202n @1 = 98 or d GO TO Q204]  
[IF Q202n @1 ≥ 1 AND Q202n @1 > 98 GO TO Q202p]

204. Did this liquid have a particular smell?

- 1 YES → ASK Q204A
- 0 NO → GO TO Q205



204A. Did it smell like [READ LIST]?

- 01 Cooking oil,
- 02 Rotten eggs or sulfur,
- 03 Gasoline,
- 04 Kerosene,
- 05 Chemicals,
- 06 Insecticides,
- 07 Something sweet,
- 08 Something musty, or
- 09 Something else? → How would you describe this odor?

205. What color (was this / were these) liquid(s)?

- 01 COLORLESS / CLEAR
- 02 DARK BROWN
- 03 LIGHT BROWN
- 04 GREY
- 05 ORANGE
- 06 RED
- 07 WHITE
- 08 OPAQUE / CLOUDY / MILKY
- 09 YELLOW
- 10 OTHER → DESCRIBE: \_\_\_\_\_
- 11 MORE THAN 1 COLOR (USE FOR GROUPS)

206. Where did they put the liquid? Did they put it . . . [READ LIST]?

(Mark YES or NO for Each Item)

[ ] IN ALL OF THE SAME LOCATIONS AS R → GO TO Q207

CATI CHECK: IF Q18 = 3 OR 4 ONLY, SKIP OVER OPTIONS C & D BELOW.

YES NO

- |   |   |  |
|---|---|--|
| 1 | 0 | a. In or near your bednetting, blankets, or sleeping bags                                  |
| 1 | 0 | b. In or around your sleeping quarters   |
| 1 | 0 | c. On the floor in your mess hall / designated eating area                                 |
| 1 | 0 | d. On the table in your mess hall / designated eating area                                 |
| 1 | 0 | e. In <u>other</u> areas where you ate (not counting mess halls / designated eating areas) |
| 1 | 0 | f. In or near your work areas  |
| 1 | 0 | g. In or near your military vehicle  |
| 1 | 0 | h. In or near your latrine   |
| 1 | 0 | i. In other areas – Where?   |

207. During [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A], how often did you see others use this liquid? [READ LIST]?

[ ] EVERYDAY

OR

\_\_\_\_\_ # TIMES

PER: DAY

WEEK

MONTH

OTHER PERIOD: \_\_\_\_\_

207sea. Did you experience any side effects from (this / these) liquid(s)?

1 YES

0 NO

204b. Did this liquid have a particular smell?

1 YES → ASK Q204Ab

0 NO → GO TO Q205b

204Ab. Did it smell like [READ LIST]?

- 01 Cooking oil,
  - 02 Rotten eggs or sulfur,
  - 03 Gasoline,
  - 04 Kerosene,
  - 05 Chemicals,
  - 06 Insecticides,
  - 07 Something sweet,
  - 08 Something musty, or
  - 09 Something else? → How would you describe this odor?
- 

205b. What color (was this / were these) liquid(s)?

- 01 COLORLESS / CLEAR
- 02 DARK BROWN
- 03 LIGHT BROWN
- 04 GREY
- 05 ORANGE
- 06 RED
- 07 WHITE
- 08 OPAQUE / CLOUDY / MILKY
- 09 YELLOW
- 10 OTHER → DESCRIBE: \_\_\_\_\_
- 11 MORE THAN 1 COLOR (USE FOR GROUPS)

206b. Where did they put the liquid? Did they put it . . . [READ LIST]?

(Mark YES or NO for Each Item)

[ ] IN ALL OF THE SAME LOCATIONS AS R → GO TO Q207b

CATI CHECK: IF Q18 = 3 OR 4 ONLY, SKIP OVER OPTIONS C & D BELOW.

YES NO

- |   |   |  |
|---|---|--|
| 1 | 0 | a. In or near your bednetting, blankets, or sleeping bags                                  |
| 1 | 0 | b. In or around your sleeping quarters   |
| 1 | 0 | c. On the floor in your mess hall / designated eating area                                 |
| 1 | 0 | d. On the table in your mess hall / designated eating area                                 |
| 1 | 0 | e. In <u>other</u> areas where you ate (not counting mess halls / designated eating areas) |
| 1 | 0 | f. In or near your work areas  |
| 1 | 0 | g. In or near your military vehicle  |
| 1 | 0 | h. In or near your latrine   |
| 1 | 0 | i. In other areas – Where?   |

207b. During [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A], how often did you see others use this liquid? [READ LIST]?

[ ] EVERYDAY

OR

\_\_\_\_\_ # TIMES

PER: DAY

WEEK

MONTH

OTHER PERIOD: \_\_\_\_\_

207seb. Did you experience any side effects from (this / these) liquid(s)?

1 YES

0 NO

204c. Did this liquid have a particular smell?

1 YES → ASK Q204Ac

0 NO → GO TO Q205c

204Ac. Did it smell like [READ LIST]?

- 01 Cooking oil,
  - 02 Rotten eggs or sulfur,
  - 03 Gasoline,
  - 04 Kerosene,
  - 05 Chemicals,
  - 06 Insecticides,
  - 07 Something sweet,
  - 08 Something musty, or
  - 09 Something else? → How would you describe this odor?
- 

205c. What color (was this / were these) liquid(s)?

- 01 COLORLESS / CLEAR
- 02 DARK BROWN
- 03 LIGHT BROWN
- 04 GREY
- 05 ORANGE
- 06 RED
- 07 WHITE
- 08 OPAQUE / CLOUDY / MILKY
- 09 YELLOW
- 10 OTHER → DESCRIBE: \_\_\_\_\_
- 11 MORE THAN 1 COLOR (USE FOR GROUPS)

206c. Where did they put the liquid? Did they put it . . . [READ LIST]?

(Mark YES or NO for Each Item)

[ ] IN ALL OF THE SAME LOCATIONS AS R → GO TO Q207c

CATI CHECK: IF Q18 = 3 OR 4 ONLY, SKIP OVER OPTIONS C & D BELOW.

YES NO

- |   |   |  |
|---|---|--|
| 1 | 0 | a. In or near your bednetting, blankets, or sleeping bags                                  |
| 1 | 0 | b. In or around your sleeping quarters   |
| 1 | 0 | c. On the floor in your mess hall / designated eating area                                 |
| 1 | 0 | d. On the table in your mess hall / designated eating area                                 |
| 1 | 0 | e. In <u>other</u> areas where you ate (not counting mess halls / designated eating areas) |
| 1 | 0 | f. In or near your work areas  |
| 1 | 0 | g. In or near your military vehicle  |
| 1 | 0 | h. In or near your latrine   |
| 1 | 0 | i. In other areas – Where?   |

207c. During [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A], how often did you see others use this liquid? [READ LIST]?

[ ] EVERYDAY

OR

\_\_\_\_\_ # TIMES

PER: DAY  
WEEK  
MONTH

OTHER PERIOD: \_\_\_\_\_

207sec. Did you experience any side effects from (this / these) liquid(s)?

- |   |     |
|---|-----|
| 1 | YES |
| 0 | NO  |

CATI CHECK Q94h:

R OR OTHERS USED OTHER PESTICIDES (Q94h = YES), ASK Q210.

OTHERS, GO TO MODULE 4.

FIELD USE OF OTHER PESTICIDES

210. You mentioned that you or someone else used other pesticides that we haven't already discussed around the places where you slept, ate, or worked during [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A] to kill or control pests.

Did you personally use them or did someone else?

- 1 SELF (CONTINUE WITH Q211)
- 2 SOMEONE ELSE (GO TO Q222)
- 3 BOTH → GO TO Q210u

- 210u. Were you and the others using the same type of this other pesticide, or different types?

- 1 DIFFERENT → First, I'd like to ask you about this other pesticide you personally used.  
Then we can talk about what others used. GO TO Q211.
- 2 SAME → GO TO Q210o
- 3 SAME & DIFFERENT → First, I'd like to talk about the other pesticide you used, along with any usage by others of (this / these) same pesticides.  
Then I'll ask about any other pesticides others used that you did not.  
GO TO Q211

- 210o. Who were the others that were using other pesticides besides you? Was it . . .

[READ LIST]?

(Mark "1" Yes or "0" No for Each Item)

- 01 U.S. military troops,
- 02 Non-U.S. military troops (Allied / International soldiers),
- 03 A local non-military source (such as local contractors), or
- 04 Someone else? – Who?: \_\_\_\_\_

211. How many different pesticides did you (and the others) use at that time, including only pesticides we haven't already discussed?

- 1 1 → IF 1, GO TO 210r
- 2 2
- 3 3
- 4 4 OR MORE

210i. Can you remember your usage of these other pesticides individually, or did you use some of these pesticides so interchangeably during [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A] that in thinking back you can't tell them apart?

- 1 REMEMBER INDIVIDUALLY
- 0 USED ALL INTERCHANGEABLY
- 2 SOME INDIVIDUALLY / SOME INTERCHANGEABLY

210r. Do you know the name(s) of the other pesticides you used in [FILL DATE]?

- 1 YES → ASK Q210n
- 0 NO → GO TO Q212

210n. What is the name of each liquid they used?

[ SEE PESTICIDE LIST – page 22 ]

210a. [IF Q210i = 1 AND Q211 ≥ 2 ASK]

I'd like to ask you about each of these other pesticides separately.

[IF Q210i = 0 AND Q211 ≥ 2 ASK]

I'd like to ask you about your usage of these other pesticides.

[IF Q210i = 2 AND Q211 ≥ 2 ASK]

I'd like to ask you about the one you used separately. Then I'll ask about the other pesticides you used.

[IF Q211 = 1 ASK]

I'd like to ask you about this other pesticide.

210b. [IF Q210n @1 = d GO TO Q212]

[IF Q210n @1 ≥ 1 AND Q210n @1 > 98 GO TO Q210p]

RESPONDENT USE OF PESTICIDES (Q212 – Q221B)

212. Did (this / these) other pesticides have a particular smell?

- 1 YES → ASK Q213
- 0 NO → GO TO Q214



213. Did it smell like [READ LIST]?

- 01 Cooking oil,
  - 02 Rotten eggs or sulfur,
  - 03 Gasoline,
  - 04 Kerosene,
  - 05 Chemicals,
  - 06 Insecticides,
  - 07 Something sweet,
  - 08 Something musty, or
  - 09 Something else? → How would you describe this odor?
- 

214. What color (was this / were these) other pesticides?

- 01 COLORLESS / CLEAR
- 02 DARK BROWN
- 03 LIGHT BROWN
- 04 GREY
- 05 ORANGE
- 06 RED
- 07 WHITE
- 08 OPAQUE / CLOUDY / MILKY
- 09 YELLOW
- 10 OTHER → DESCRIBE: \_\_\_\_\_

215. Where did you (and the others) get the other pesticides? Was it . . . [READ LIST]?

- 01 US military issued,
- 02 from the PX,
- 03 from the US (something you brought with you from the US, from a friend or relative in the US, etc.)
- 04 from fellow US soldiers,
- 05 from international soldiers or a local source (Allied / International Soldiers, local contractors, or other non-US source: Saudis, Turks, Bahraini, Egyptians, Syrians),
- 06 or from some other source? → DESCRIBE: \_\_\_\_\_
- 07 DON'T KNOW

216. Where did you (and the others) put this pesticide? Did you put it . . . [READ LIST]?

(Mark YES or NO for Each Item)

CATI CHECK: IF Q18 < 3 OR 4 ONLY, SKIP OVER OPTIONS C & D BELOW.

YES NO

- |   |   |  |
|---|---|--|
| 1 | 0 | a. In or near your bednetting, blankets, or sleeping bags                                  |
| 1 | 0 | b. In or around your sleeping quarters   |
| 1 | 0 | c. On the floor in your mess hall / designated eating area                                 |
| 1 | 0 | d. On the table in your mess hall / designated eating area                                 |
| 1 | 0 | e. In <u>other</u> areas where you ate (not counting mess halls / designated eating areas) |
| 1 | 0 | f. In or near your work areas  |
| 1 | 0 | g. In or near your military vehicle  |
| 1 | 0 | h. In or near your latrine   |
| 1 | 0 | i. In other areas – Where?   |

217. During [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A], how often did you use these pesticides?

[ ] EVERYDAY

OR

\_\_\_\_\_ # OF TIMES

PER: DAY  
WEEK  
MONTH

OTHER PERIOD: \_\_\_\_\_

CATI CHECK: ASK 217A ONLY IF Q210 = 3 AND Q210n = 2.

217A. During [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A], how often did you see others use these pesticides?

[ ] EVERYDAY

OR

\_\_\_\_\_ # TIMES

PER: DAY  
WEEK  
MONTH

OTHER PERIOD: \_\_\_\_\_

218. During [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A], did you (or others) dispose of the old pesticides?

YES → GO TO 218A

NO → GO TO 219

218A. How did you (or others) dispose of (it / them)?

(Mark "1" Yes or "0" No for Each Item)

1 DUMPED IN OUTSIDE TRASH CONTAINER

2 DUMPED IN INSIDE TRASH CONTAINER

3 DIDN'T HAVE TO DUMP IT BECAUSE WIND WOULD BLOW IT AWAY

4 OTHER – DESCRIBE: \_\_\_\_\_

IF Q217 = EVERYDAY, GO TO Q220

219. Did you personally stop using (this /these) pesticides during [RANDOM DATE OR DATES IN 11A] because [READ LIST]?

(Mark "1" Yes or "0" No for Each Item)

	<u>Yes</u>	<u>No</u>
a. pests stopped being a problem; because	1	0
b. you ran out of pesticides; or	1	0
c. for any other reason?	1	0

Describe: \_\_\_\_\_

220. Did you experience any side effects from (this / these) pesticides?

1 YES → ASK Q220A

0 NO → GO TO Q221

*NOTE FOR TRAINING: PHRASE "STOP USING THIS PESTICIDE" SHOULD BE BYPASSED IF Q217 = "EVERYDAY" OR Q219 a-c=NO.*

220A. During this period, did you stop using (this / these) pesticide(s) or reduce the amount you used because of these side effects?

1 YES

0 NO

221. Were you ever issued protective equipment during [FILL MONTH] when you handled (this / these) pesticide(s)?

- 1 YES → GO TO Q221A
- 0 NO → GO TO NEXT CATI CHECK

221A. Did you use this protective equipment during [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A] when you handled (this / these) pesticide(s)

- 1 YES → ASK Q221B
- 0 NO → GO TO NEXT CATI CHECK

221B. How often did you use this protective equipment? [READ LIST]

- 1 Never,
- 2 Sometimes,
- 3 Usually, or
- 4 Always?

CATI: REPEAT Q212 – 221B FOR THE 2<sup>ND</sup> AND 3<sup>RD</sup> PESTICIDE USED BY THE RESPONDENT.  
INTERVIEWER, SAY: Now let's talk about the 2<sup>ND</sup> AND 3<sup>RD</sup> pesticide you used.

212b. Did (this / these) other pesticides have a particular smell?

- 1 YES → ASK Q213b
- 0 NO → GO TO Q214b

213b. Did it smell like [READ LIST]?

- 01 Cooking oil,
  - 02 Rotten eggs or sulfur,
  - 03 Gasoline,
  - 04 Kerosene,
  - 05 Chemicals,
  - 06 Insecticides,
  - 07 Something sweet,
  - 08 Something musty, or
  - 09 Something else? → How would you describe this odor?
-

214b. What color (was this / were these) other pesticides?

- 01 COLORLESS / CLEAR
- 02 DARK BROWN
- 03 LIGHT BROWN
- 04 GREY
- 05 ORANGE
- 06 RED
- 07 WHITE
- 08 OPAQUE / CLOUDY / MILKY
- 09 YELLOW
- 10 OTHER → DESCRIBE: \_\_\_\_\_

215b. Where did you (and the others) get the other pesticides? Was it . . . [READ LIST]?

- 01 US military issued,
- 02 from the PX,
- 03 from the US (something you brought with you from the US, from a friend or relative in the US, etc.)
- 04 from fellow US soldiers,
- 05 from international soldiers or a local source (Allied / International Soldiers, local contractors, or other non-US source: Saudis, Turks, Bahraini, Egyptians, Syrians),
- 06 or from some other source? → DESCRIBE: \_\_\_\_\_
- 07 DON'T KNOW

216b. Where did you (and the others) put this pesticide? Did you put it . . . [READ LIST]?

(Mark YES or NO for Each Item)

CATI CHECK: IF Q18 = 3 OR 4 ONLY, SKIP OVER OPTIONS C & D BELOW.

YES NO

- |   |   |  |
|---|---|--|
| 1 | 0 | a. In or near your bednetting, blankets, or sleeping bags                                  |
| 1 | 0 | b. In or around your sleeping quarters   |
| 1 | 0 | c. On the floor in your mess hall / designated eating area                                 |
| 1 | 0 | d. On the table in your mess hall / designated eating area                                 |
| 1 | 0 | e. In <u>other</u> areas where you ate (not counting mess halls / designated eating areas) |
| 1 | 0 | f. In or near your work areas  |
| 1 | 0 | g. In or near your military vehicle  |
| 1 | 0 | h. In or near your latrine   |
| 1 | 0 | i. In other areas – Where?   |

217b. During [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A], how often did you use these pesticides?

[ ] EVERYDAY

OR

\_\_\_\_\_ # OF TIMES

PER: DAY

WEEK

MONTH

OTHER PERIOD: \_\_\_\_\_

CATI CHECK: ASK 217Ab ONLY IF Q210 = 3 AND Q210n = 2.

217Ab. During [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A], how often did you see others use these pesticides?

[ ] EVERYDAY

OR

\_\_\_\_\_ # TIMES

PER: DAY

WEEK

MONTH

OTHER PERIOD: \_\_\_\_\_

218b. During [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A], did you (or others) dispose of the old pesticides?

YES → GO TO 218Ab

NO → GO TO 219b

218Ab. How did you (or others) dispose of (it / them)?

(Mark "1" Yes or "0" No for Each Item)

- 1 DUMPED IN OUTSIDE TRASH CONTAINER
- 2 DUMPED IN INSIDE TRASH CONTAINER
- 3 DIDN'T HAVE TO DUMP IT BECAUSE WIND WOULD BLOW IT AWAY
- 4 OTHER - DESCRIBE: \_\_\_\_\_

IF Q217b = EVERYDAY, GO TO Q220b

219b. Did you personally stop using (this /these) pesticides during [RANDOM DATE OR DATES IN 11A] because [READ LIST]?

(Mark "1" Yes or "0" No for Each Item)

	<u>Yes</u>	<u>No</u>
a. pests stopped being a problem; because	1	0
b. you ran out of pesticides; or	1	0
c. for any other reason?	1	0

Describe: \_\_\_\_\_

220b. Did you experience any side effects from (this / these) pesticides?

1 YES → ASK Q220Ab

0 NO → GO TO Q221b

*NOTE FOR TRAINING: PHRASE "STOP USING THIS PESTICIDE" SHOULD BE BYPASSED IF Q217b = "EVERYDAY" OR Q219b a-c = NO.*

220Ab. During this period, did you stop using (this / these) pesticide(s) or reduce the amount you used because of these side effects?

1 YES

0 NO

221b. Were you ever issued protective equipment during [FILL MONTH] when you handled (this / these) pesticide(s)?

- 1 YES → GO TO Q221Ab
- 0 NO → GO TO NEXT CATI CHECK

221Ab. Did you use this protective equipment during [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A] when you handled (this / these) pesticide(s)

- 1 YES → ASK Q221Bb
- 0 NO → GO TO NEXT CATI CHECK

221Bb. How often did you use this protective equipment? [READ LIST]

- 1 Never,
- 2 Sometimes,
- 3 Usually, or
- 4 Always?

CATI: REPEAT Q212 – 221B FOR THE 3<sup>RD</sup> PESTICIDE USED BY THE RESPONDENT. INTERVIEWER, SAY:  
Now let's talk about the 3<sup>RD</sup> pesticide you used.

212c. Did (this / these) other pesticides have a particular smell?

- 1 YES → ASK Q213c
- 0 NO → GO TO Q214c

213c. Did it smell like [READ LIST]?

- 01 Cooking oil,
- 02 Rotten eggs or sulfur,
- 03 Gasoline,
- 04 Kerosene,



- 05 Chemicals,
  - 06 Insecticides,
  - 07 Something sweet,
  - 08 Something musty, or
  - 09 Something else? → How would you describe this odor?
- 

214c. What color (was this / were these) other pesticide(s)?

- 01 COLORLESS / CLEAR
- 02 DARK BROWN
- 03 LIGHT BROWN
- 04 GREY
- 05 ORANGE
- 06 RED
- 07 WHITE
- 08 OPAQUE / CLOUDY / MILKY
- 09 YELLOW
- 10 OTHER → DESCRIBE: \_\_\_\_\_

215c. Where did you (and the others) get the other pesticide(s)? Was it . . . [READ LIST]?

- 01 US military issued,
- 02 from the PX,
- 03 from the US (something you brought with you from the US, from a friend or relative in the US, etc.)
- 04 from fellow US soldiers,
- 05 from international soldiers or a local source (Allied / International Soldiers, local contractors, or other non-US source: Saudis, Turks, Bahraini, Egyptians, Syrians),
- 06 or from some other source? → DESCRIBE: \_\_\_\_\_
- 07 DON'T KNOW

216c. Where did you (and the others) put this pesticide? Did you put it . . . [READ LIST]?

(Mark YES or NO for Each Item)

CATI CHECK: IF Q18 > 3 OR 4 ONLY, SKIP OVER OPTIONS C & D BELOW.

YES NO

- |   |   |  |
|---|---|--|
| 1 | 0 | a. In or near your bednetting, blankets, or sleeping bags                                  |
| 1 | 0 | b. In or around your sleeping quarters   |
| 1 | 0 | c. On the floor in your mess hall / designated eating area                                 |
| 1 | 0 | d. On the table in your mess hall / designated eating area                                 |
| 1 | 0 | e. In <u>other</u> areas where you ate (not counting mess halls / designated eating areas) |
| 1 | 0 | f. In or near your work areas  |
| 1 | 0 | g. In or near your military vehicle  |
| 1 | 0 | h. In or near your latrine   |
| 1 | 0 | i. In other areas – Where?   |

217c. During [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A], how often did you use these pesticides?

[ ] EVERYDAY

OR

\_\_\_\_\_ # OF TIMES

PER: DAY

WEEK

MONTH

OTHER PERIOD: \_\_\_\_\_

CATI CHECK: ASK 217Ac ONLY IF Q210 = 3 AND Q210n = 2.

217Ac. During [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A], how often did you see others use these pesticides?

[ ] EVERYDAY

OR

\_\_\_\_\_ # TIMES

PER: DAY

WEEK

MONTH

OTHER PERIOD: \_\_\_\_\_

218c. During [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A], did you (or others) dispose of the old pesticides?

YES → GO TO 218Ac

NO → GO TO 219c

218Ac. How did you (or others) dispose of (it / them)?

(Mark "1" Yes or "0" No for Each Item)

- 1 DUMPED IN OUTSIDE TRASH CONTAINER
- 2 DUMPED IN INSIDE TRASH CONTAINER
- 3 DIDN'T HAVE TO DUMP IT BECAUSE WIND WOULD BLOW IT AWAY
- 4 OTHER – DESCRIBE: \_\_\_\_\_

IF Q217c = EVERYDAY, GO TO Q220c

219c. Did you personally stop using (this /these) pesticide(s) during [RANDOM DATE OR DATES IN 11A] because [READ LIST]?

(Mark "1" Yes or "0" No for Each Item)

	<u>Yes</u>	<u>No</u>
a. pests stopped being a problem; because	1	0
b. you ran out of pesticides; or	1	0
c. for any other reason?	1	0
Describe: _____		

220c. Did you experience any side effects from (this / these) pesticide(s)?

- 1 YES → ASK Q220Ac
- 0 NO → GO TO Q221c

*NOTE FOR TRAINING: PHRASE "STOP USING THIS PESTICIDE" SHOULD BE BYPASSED IF Q217c = "EVERYDAY" OR Q219c a-c = NO.*

220Ac. During this period, did you stop using (this / these) pesticide(s) or reduce the amount you used because of these side effects?

- 1 YES
- 0 NO

221c. Were you ever issued protective equipment during [FILL MONTH] when you handled (this / these) pesticide(s)?

- 1 YES → GO TO Q221Ac
- 0 NO → GO TO NEXT CATI CHECK

221Ac. Did you use this protective equipment during [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A] when you handled (this / these) pesticide(s)

- 1 YES → ASK Q221Bc
- 0 NO → GO TO NEXT CATI CHECK

221Bc. How often did you use this protective equipment? [READ LIST]

- 1 Never,
- 2 Sometimes,
- 3 Usually, or
- 4 Always?

OTHER PESTICIDES USED BY OTHERS

CATI CHECK: CONTINUE WITH Q222 ONLY IF SOMEONE ELSE SET OUT THE PESTICIDES (Q210 = 2 OR Q210 = 3 (BOTH & DIFFERENT))

OTHERS GO TO NEXT MODULE.

222. You mentioned that someone else used other types of pesticides at that time. Do you know who did this? Were they... [READ LIST]?

(Mark "1" Yes or "0" No for Each Item)

- 01 U.S. military troops,
- 02 Non-U.S. military troops (Allied / International soldiers),
- 03 A local non-military source (such as local contractors), or
- 04 Someone else? – Who?: \_\_\_\_\_

223. To your knowledge, how many different types of other pesticides did they use during that time?

- 1 1 → IF 1, GO TO 222r
- 2 2
- 3 3
- 4 4 OR MORE

Q222i. Can you remember others' usage of these pesticides individually, or did they use these other pesticides so interchangeably during [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A] that in thinking back you can't tell them apart?

- 1 REMEMBER INDIVIDUALLY
- 0 USED ALL INTERCHANGEABLY
- 2 SOME INDIVIDUALLY / SOME INTERCHANGEABLY

222r. Do you know the name(s) of the other pesticide(s) that were used by others?

- 1 YES → ASK Q222n
- 0 NO → GO TO Q224

222n. What is the name of each pesticide they used?

[ SEE PESTICIDE LIST – page 22 ]

222intro. [IF Q222i = 1 AND Q223 ≥ 2 ASK]  
I'd like to ask you about each of these other pesticides separately.

[IF Q222i = 0 AND Q223 ≥ 2 ASK]  
I'd like to ask you about their use of these other pesticides.

[IF Q223 = 1 ASK]  
I'd like to ask you about this other pesticide.

222b. [IF Q222n @1 = 98 or d GO TO Q224]  
[IF Q222n @1 ≥ 1 AND Q222n @1 < 98 GO TO Q226]

224. Did this other pesticide have a particular smell?

- 1 YES → ASK Q224A
- 0 NO → GO TO Q225

224A. Did it smell like [READ LIST]?

- 01 Cooking oil
  - 02 Rotten eggs or sulfur,
  - 03 Gasoline
  - 04 Kerosene
  - 05 Chemicals
  - 06 Insecticides
  - 07 Something sweet
  - 08 Something musty, or
  - 09 Something else → How would you describe this odor?
- 

225. What color (was this / were these) other pesticide(s)?

- 01 COLORLESS / CLEAR
- 02 DARK BROWN
- 03 LIGHT BROWN
- 04 GREY
- 05 ORANGE
- 06 RED
- 07 WHITE
- 08 OPAQUE / CLOUDY / MILKY
- 09 YELLOW
- 10 OTHER → DESCRIBE: \_\_\_\_\_

226. Where did they put the other pesticide? Did they put it [READ LIST]?

[ ] IN ALL OF THE SAME LOCATIONS AS R → GO TO Q227

CATI CHECK: IF Q18 = 3 OR 4 ONLY, SKIP OVER OPTIONS C & D BELOW.

YES NO

- |   |   |  |
|---|---|--|
| 1 | 0 | a. In or near your bednetting, blankets, or sleeping bags                                  |
| 1 | 0 | b. In or around your sleeping quarters   |
| 1 | 0 | c. On the floor in your mess hall / designated eating area                                 |
| 1 | 0 | d. On the table in your mess hall / designated eating area                                 |
| 1 | 0 | e. In <u>other</u> areas where you ate (not counting mess halls / designated eating areas) |
| 1 | 0 | f. In or near your work areas  |
| 1 | 0 | g. In or near your military vehicle  |
| 1 | 0 | h. In or near your latrine   |
| 1 | 0 | i. In other areas – Where?   |

227. During [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A], how often did you see others use this other pesticide? [READ LIST]

[ ] EVERYDAY

OR

\_\_\_\_\_ # OF TIMES

PER: DAY

WEEK

MONTH

OTHER PERIOD: \_\_\_\_\_

227sea. Did you experience any side effects from (this / these) other pesticide(s)?

1 YES

0 NO

CATI: REPEAT Q224 – 227 FOR THE 2<sup>ND</sup> AND 3<sup>RD</sup> PESTICIDES (IF APPLICABLE).

OTHERS GO TO NEXT CATI CHECK.

224b. Did this other pesticide have a particular smell?

- 1 YES → ASK Q224Ab
- 0 NO → GO TO Q225b

224Ab. Did it smell like [READ LIST]?

- 01 Cooking oil
  - 02 Rotten eggs or sulfur,
  - 03 Gasoline
  - 04 Kerosene
  - 05 Chemicals
  - 06 Insecticides
  - 07 Something sweet
  - 08 Something musty, or
  - 09 Something else → How would you describe this odor?
- 

225b. What color (was this / were these) other pesticide(s)?

- 01 COLORLESS / CLEAR
- 02 DARK BROWN
- 03 LIGHT BROWN
- 04 GREY
- 05 ORANGE
- 06 RED
- 07 WHITE
- 08 OPAQUE / CLOUDY / MILKY
- 09 YELLOW
- 10 OTHER → DESCRIBE: \_\_\_\_\_



226b. Where did they put the other pesticide? Did they put it [READ LIST]?

[ ] IN ALL OF THE SAME LOCATIONS AS R → GO TO Q227b

CATI CHECK: IF Q18 = 3 OR 4 ONLY, SKIP OVER OPTIONS C & D BELOW.

YES NO

- |   |   |  |
|---|---|--|
| 1 | 0 | a. In or near your bednetting, blankets, or sleeping bags                                  |
| 1 | 0 | b. In or around your sleeping quarters   |
| 1 | 0 | c. On the floor in your mess hall / designated eating area                                 |
| 1 | 0 | d. On the table in your mess hall / designated eating area                                 |
| 1 | 0 | e. In <u>other</u> areas where you ate (not counting mess halls / designated eating areas) |
| 1 | 0 | f. In or near your work areas  |
| 1 | 0 | g. In or near your military vehicle  |
| 1 | 0 | h. In or near your latrine   |
| 1 | 0 | i. In other areas – Where?   |

227b. During [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A], how often did you see others use this other pesticide? [READ LIST]

[ ] EVERYDAY

OR

\_\_\_\_\_ # OF TIMES

PER: DAY

WEEK

MONTH

OTHER PERIOD: \_\_\_\_\_

227seb. Did you experience any side effects from (this / these) other pesticide(s)?

1 YES

0 NO

CATI: REPEAT Q224 – 227 FOR THE 3<sup>RD</sup> PESTICIDE (IF APPLICABLE).

OTHERS GO TO NEXT CATI CHECK.

224c. Did this other pesticide have a particular smell?

1 YES → ASK Q224Ac

0 NO → GO TO Q225c

224Ac. Did it smell like [READ LIST]?

01 Cooking oil

02 Rotten eggs or sulfur,

03 Gasoline

04 Kerosene

05 Chemicals

06 Insecticides

07 Something sweet

08 Something musty, or

09 Something else → How would you describe this odor?

---

225c. What color (was this / were these) other pesticide(s)?

01 COLORLESS / CLEAR

02 DARK BROWN

03 LIGHT BROWN

04 GREY

05 ORANGE

06 RED

07 WHITE

08 OPAQUE / CLOUDY / MILKY

09 YELLOW

10 OTHER → DESCRIBE: \_\_\_\_\_

226c. Where did they put the other pesticide? Did they put it [READ LIST]?

[ ] IN ALL OF THE SAME LOCATIONS AS R → GO TO Q227c

CATI CHECK: IF Q18 = 3 OR 4 ONLY, SKIP OVER OPTIONS C & D BELOW.

YES NO

- |   |   |  |
|---|---|--|
| 1 | 0 | a. In or near your bednetting, blankets, or sleeping bags                                  |
| 1 | 0 | b. In or around your sleeping quarters   |
| 1 | 0 | c. On the floor in your mess hall / designated eating area                                 |
| 1 | 0 | d. On the table in your mess hall / designated eating area                                 |
| 1 | 0 | e. In <u>other</u> areas where you ate (not counting mess halls / designated eating areas) |
| 1 | 0 | f. In or near your work areas  |
| 1 | 0 | g. In or near your military vehicle  |
| 1 | 0 | h. In or near your latrine   |
| 1 | 0 | i. In other areas – Where?   |

227c. During [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A], how often did you see others use this other pesticide? [READ LIST]

[ ] EVERYDAY

OR

\_\_\_\_\_ # OF TIMES

PER:

DAY

WEEK

MONTH

OTHER PERIOD: \_\_\_\_\_

227sec. Did you experience any side effects from (this / these) other pesticide(s)?

1 YES

0 NO

303. Now I have a couple of questions about your uniforms. Do you know if any of the uniforms you were issued for your Desert Storm / Desert Shield tour were pre-treated with pesticides?

YES → GO TO Q304

NO → GO TO INTRO TO Q306intro

304. How many pre-treated uniforms were you issued?

ENTER # OF UNIFORMS: \_\_\_\_\_

305. How often did you wear these pre-treated uniforms during [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A]?

[ ] EVERYDAY

OR

\_\_\_\_\_ # OF TIMES

PER: DAY

WEEK

MONTH

OTHER PERIOD: \_\_\_\_\_

306intro. We've just finished talking in great detail about your experiences with pesticides during [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A]. Now we'd like to know a little about your experiences with pesticides during other months of your tour.

306. Was there any particular month during your tour(s), or a particular area that you were in, when use of pesticides by yourself or others was greater than during the month we just talked about?

YES → GO TO Q307

NO → GO TO MODULE 4

307. What month / area? Can you tell me just a little bit about how your experience with pesticides during this time was different than during [RANDOM MONTH, FIRST/LAST 30 DAYS OF TOUR, OR START TO END DATES IN Q11A]?

ENTER MONTH / AREA: \_\_\_\_\_

COMMENTS: \_\_\_\_\_

MODULE 4  
BACKGROUND QUESTIONS

ENTER TIME NOW: \_\_\_\_\_ AM / PM

Thank you for your time so far. Just to let you know, we have a few remaining questions about your general background. We'll be finished in about 2 minutes.

308. How many years of regular school or college have you completed?

- 1 LESS THAN 12
- 2 12
- 3 13-14
- 4 15-16
- 5 17-18
- 6 19+

309. What is the highest degree you received?

- 1 LESS THAN HIGH SCHOOL DIPLOMA
- 2 HIGH SCHOOL EQUIVALENCY (GED)
- 3 HIGH SCHOOL DIPLOMA
- 4 SOME COLLEGE (OR AA DEGREE) BUT NO BACHELOR'S DEGREE
- 5 BACHELOR'S DEGREE
- 6 POST-GRADUATE DEGREE (MA, MS, PHD, LLD, MD)

CATI CHECK: RANDOMIZE THE ORDER OF THE RESPONSE CATEGORIES IN Q310.

FOR HALF THE SAMPLE, LIST HEALTH CATEGORIES FROM EXCELLENT TO POOR. FOR THE OTHER HALF, LIST HEALTH CODES FROM POOR TO EXCELLENT SO WE CAN TEST ORDER EFFECTS ON SURVEY ANSWERS TO THE HEALTH STATUS MEASURE. CATI SHOULD KEEP TRACK OF WHICH VERSION OF Q310 WAS ADMINISTERED TO EACH R.

310. In general, would you say your health is [INSERT CORRECT CODE VERSION]?

Version A:

- 5 Excellent (GO TO Q312)
- 4 Very good (GO TO Q312)
- 3 Good (GO TO Q312)
- 2 Fair (ASK Q311)
- 1 Poor (ASK Q311)

Version B:

- 1 Poor (ASK Q311)
- 2 Fair (ASK Q311)
- 3 Good (GO TO Q312)
- 4 Very good (GO TO Q312)
- 5 Excellent (GO TO Q312)

311. Do you or your doctor think there could be any connection between your current health and the Gulf War?

- 1 YES
- 0 NO

312. Have you ever added your name to the Gulf War registry that is maintained by the [READ LIST]?

(Mark "1" Yes or "0" No for Each Item)

	YES	NO
a. Veteran's Administration (The official name of this registry is VA Persian Gulf Registry)	1	0
b. Department of Defense (The official name of this registry is the Comprehensive Clinical Evaluation Program, also known as CCEP.)	1	0

313. INTERVIEWER CHECK:

DID R HAVE QUESTIONS ABOUT HIS GULF WAR SERVICE OR MILITARY BENEFITS?

- 1 YES → READ STATEMENT 314 BELOW
- 0 NO → GO TO Q315

314. One of the contact managers at the Department of Defense Gulf War Task Force can answer any questions about your Gulf War Service or about military benefits. The hotline number is (800) 497-6261. And their internet address is [www.gulflink.osd.mil](http://www.gulflink.osd.mil).

If you prefer, I can give your name and phone number to one of the contact managers so they can call you within 7-10 days. Would you like for me to give this person your name and phone number?

- 1 YES → FORWARD CONTACT INFORMATION TO OSAGWI.
- 0 NO  
[IF NO, SAY] OK. You can contact them directly at the number I gave you. Or you can check the DoD internet web page for more information.

NOTE THAT CATI WILL NEED TO BRANCH DEPENDING ON WHETHER THE RESPONDENT SERVED IN THE AIR FORCE OR NOT.

315. INTERVIEWER CHECK

DID R INDICATE AT THE START OF THE INTERVIEW THAT HIS/HER UNIT NAME IN OUR RECORDS WAS NOT CORRECT (Q4A = NO)?

- 1 UNIT INFO WAS INCORRECT → READ STATEMENT A OR B BASED ON  
THE RESPONDENT'S SERVICE BRANCH
- 0 UNIT INFO WAS CORRECT → GO TO Q316

315A. FOR ARMY, MARINE CORPS, NAVY, AND COAST GUARD:

"Earlier you noted that the unit name in our records was not correct. The United States Armed Services Center for Research of Unit Records can correct your record in the official DoD Persian Gulf Personnel Registry and requests that you call (703) 806-7822 (DSN 656-7822) or e-mail [swartwoutr@crur.belvoir.army.mil](mailto:swartwoutr@crur.belvoir.army.mil) to correct your record."

315B. FOR AIR FORCE:

"Earlier you noted that the unit name in our records was not correct. The United States Armed Services Center for Research of Unit Records can correct your record in the official DoD Persian Gulf Personnel Registry. They would like you to contact their office to update your official records. You can call (703) 806-7822 (DSN 656-7822) or e-mail [swartwoutr@crur.belvoir.army.mil](mailto:swartwoutr@crur.belvoir.army.mil) to speak with the Air Force Liaison Officer, Lieutenant Swanson, concerning correction of your record."

MODULE 5  
ENDING THE INTERVIEW

ENTER TIME NOW: \_\_\_\_\_ AM / PM

316. We really appreciate your contribution to this important study. We may ask some veterans to participate in a short 15 minute follow-up survey in a few months. If you're selected, would you be willing to take part in a follow-up interview?

1 YES

0 NO

317. IF Q313 = YES, READ: If you have any questions about your Gulf War service or about your military benefits, the Department of Defense has contact managers that are happy to answer any questions you may have.

318. IF Q313 = NO, READ: We would like to let you know that if you have any questions about your Gulf War service or about your military benefits, the Department of Defense has contact managers that would be happy to answer any questions you may have. If you are interested, I can give you their toll-free hotline number and the address of their website . . .

IF INTERESTED → GO TO 314 SCREEN TO GIVE DoD # & WEBSITE

ALL: Do you have any questions of me? IF SO, READ FROM Q&A SHEET OR REFER TO DoD CMs.

319. ENTER TIME ENDED: \_\_\_\_\_ AM / PM

320. LENGTH OF INTERVIEW: \_\_\_\_\_ minutes

321. ENTER DATE INTERVIEW COMPLETED: MM / DD / YY

322. CATI CHECK: RANDOMLY SELECT A SAMPLE OF 200 VETERANS FOR FOLLOWUP INTERVIEW FROM VETERANS WHO SAID YES TO Q316.



MODULE 6  
INTERVIEWER OBSERVATIONS

INTERVIEWER: ANSWER Q323 – 328 IMMEDIATELY AFTER YOU COMPLETE THE INTERVIEW.

323. RESPONDENT'S COOPERATION WAS:

- 5 VERY GOOD
- 4 GOOD
- 3 FAIR
- 2 POOR
- 1 VERY POOR

324. HOW SUSPICIOUS DID THE RESPONDENT SEEM ABOUT THE STUDY, BEFORE THE INTERVIEW?

- 1 NOT AT ALL
- 2 SOMEWHAT
- 3 VERY SUSPICIOUS

325. OVERALL, HOW HIGH WAS THE RESPONDENT'S INTEREST IN THE INTERVIEW?

- 5 VERY HIGH
- 4 ABOVE AVERAGE
- 3 AVERAGE
- 2 BELOW AVERAGE
- 1 VERY LOW

326. DID R HAVE ANY QUESTIONS OR CONCERNS ABOUT:  
(Mark "1" Yes or "0" No for Each Item)

	<u>YES</u>	<u>NO</u>
a. HEALTH-RELATED PROBLEMS?	1	0
b. ELIGIBILITY FOR MILITARY BENEFITS?	1	0
c. PESTICIDE EXPOSURE IN THE GULF WAR?	1	0
d. EXPOSURE TO OTHER HAZARDS IN THE GULF WAR?	1	0

Describe: \_\_\_\_\_

e. ANY OTHER CONCERNS ABOUT HIS GULF WAR SERVICE?	1	0
---	---	---

Describe: \_\_\_\_\_

327. DURING THE PHONE INTERVIEW, DID THE R SHOW ANY SIGNS OF HAVING PAID ATTENTION TO THE GULF WAR MAP, TIMELINE OR CALENDAR THAT WE MAILED IN ADVANCE?

- 1 YES
- 0 NO

328. DID THE RESPONDENT SHOW ANY SIGN OF HESITANCY OR DISTRESS DURING THE INTERVIEW?

- 1 YES
- 0 NO

MODULE 7  
REFUSAL REPORT

FILL OUT THIS SECTION IF THE RESPONDENT REFUSED TO PARTICIPATE.

329. Who refused?

- 1 Designated survey respondent
- 2 Someone else? Who?

\_\_\_\_\_  
Person's Name and Relationship to R

330. What reasons did this person give for refusing?

RECORD COMMENTS VERBATIM AND CIRCLE ALL REASONS MENTIONED.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

*(Mark All That Apply)*

- 01 Not interested in the topics covered by the survey
- 02 Interview was too long
- 03 Dislikes RAND
- 04 Doesn't trust Department of Defense
- 05 Concerned about confidentiality of the survey
- 06 Dislikes surveys in general
- 07 Other

331. What did you say or do to try to encourage the respondent to participate?

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

332. Would you describe this as a:

- 1 Soft refusal
- 2 Firm but not hostile refusal
- 3 Hostile refusal

333. Why do you feel this way?

---

---

---

334. Do you have any other comments about this respondent that would help us better understand the reasons why this respondent refused to participate?

---

---

---

335. Do you think another interviewer (e.g., specially trained refusal converter) might be successful in convincing this respondent to participate at a later date?

- 1 Yes
- 0 No

Q227A. Why do you feel this way?

---

---

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**THE END**